***United States Court of Appeals***

***for the Second Circuit***

# APPENDIX

ORIGINAL

# 74-1818

# United States Court of Appeals

## For the Second Circuit.

DAVID LANE and MARY ANN LANE,
*Plaintiffs-Appellants,*

*against*

GENERAL MOTORS CORPORATION, A. B. CHANCE CO. and PITMAN MANUFACTURING CO., a division thereof (herein referred to as "Pitman"), and GOODYEAR TIRE & RUBBER COMPANY,

*Defendants-Appellees.*

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK.

## APPENDIX.

**Volume I—Pages 1a to 422a.**


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UNITED STATES COURT OF APPEALS
FILED
DEC 9 1974
SECOND CIRCUIT



THE REPORTER COMPANY, INC., New York, N. Y. 10007—212 732-6978—1974

(5264)

PAGINATION AS IN ORIGINAL COPY

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UNITED STATES COURT OF APPEALS.

For the Second Circuit.

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DAVID LANE and MARY ANN LANE,

*Plaintiffs-Appellants,*

*-against-*

GENERAL MOTORS CORPORATION, A. B. CHANCE CO. and PITMAN MANUFACTURING CO., a division thereof (herein referred to as "Pitman"), and GOODYEAR TIRE & RUBBER COMPANY,

*Defendants-Appellees.*

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK.

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DOCKET ENTRIES.

## DOCKET ENTRIES

| | |
|---|---|
| Mar5-71 | Filed Complaint. Issued Summons. |
| Mar.26-71 | Filed Notice of Deposition upon oral examination of plaintiffs. |
| Mar.26-71 | Filed Notice for Discovery and Inspection. |
| Mar.26-71 | Filed Interrogatories. |
| Mar.26-71 | Filed ANSWER of General Motors Corp. to co plaint. |
| Apr.12-71 | Filed summons with marshal's ret. Served General Motors Corp. by John Backer on 3-9-71 |
| | Served A. B. Chance Co. by Lorey Davis on 3-15-71 |
| | Served Goodyear Tire by Smith on 3-22-71 |
| Apr.22-71 | Filed ANSWER of A. B. Change Co. and Pitman Manufacturing Co. to the complaint. |
| Apr.26-71 | Filed stip and order that time of deft Goodyear Tire & Rubber Co. to Answer the complaint is extended to 5-2-71 Motley J. |
| May 4-71 | Filed stipulation and order extending deft. Goodyear Tire & Rubber Co.'s time to answer complaint to 5/23/71. So ordered. Tenney, J. |
| May 25-71 | Filed ANSWER of Goodyear Tire & Rubber Co. with jury demand. |
| Jun.16-71 | Filed deft. Goodyear Tire & Rubber Co. Interrogs. addressed to pltff. |
| Jul. 26-71 | Filed ANSWER of Goodyear Tire & Rubber Co. to cross-complaint of deft. General MotorsCorp. |
| Oct.15-71 | Filed Answer of defts. A.B.Chance Co. and Pitman Mfg.Co. to cross-complaint of General Motors Corp. |
| Nov.10-71 | Filed Notice of Motion re: Strike Ans. (re:Interrogs.) Ret. 11/18/71.(by pltfs.) |
| Nov.10-71 | Filed Plaintiffs' Memorandum of Law. |
| Nov.10-71 | Filed Notice for Discovery and Inspection. |
| Nov.18-71 | Filed Plaintiffs' Answers to Deft. Goodyear's Interrogs. |
| Nov.18-71 | Filed Plaintiffs' Answers to Deft. General Motors Corp.'s Interrogs. |
| Nov.18-71 | Filed Interrogatories. |
| Nov.18-71 | Filed Plaintiffs' Answers to Interrogs propounded by deft. A.B.Chance-Pitman Mfg. |
| Nov.23-71 | Filed Notice of Deposition of Jersey Central Power and Light Co., by a person with knowledge of the facts as indicated. |
| Nov.23-71 | Filed Notice of Deposition of Trooper Richard A. Dancisin, State Police Barracks. |
| | Filed Notice of Deposition of David L. Burlew, c/o Jersey Central Power and Light Co. |
| Dec.2-71 | Filed MEMO.END. onmotion papers filed 11/10/71. Motion marked off for non-appearance. So ordered. Ryan, J. |
| Dec.16-71 | Filed defts' A.B. Chance and Pitman Mfg. Co. Cross Notice of Deposition of Trooper Richard A. Dancisin, on 12-20-71, etc. |
| Jan 2?/72 | Filed Notice of Motion Re: Strike Answer ret. 3/2/72. |
| Feb. 22/72 | Filed Pltffs Memorandum of Law. |
| Feb 9.72 | Filed Memo End. on motion paper dated 2/22/72. Motion marked off for non appearance. So Ordered Metzner J. |
| Mar 15.72 | Filed dfts A.B Chance Co.& Pitman Mfg. Co. Answer to Interrogs. |
| 72 | Filed Deft General Motors Corp. Notice of motion ret. 7-18-72 for Discovery and inspection. |
| 72 | Filed Deft Gen'l Motors Corp. memo of law in support of motion filed this day. |
| Mar.7.73 | Filed notice of deposition of William Green, Ken Leighton, Dave Baugher and John Nichols. |
| Mar.15-73 | Filed Notice for Discovery and Inspection. |
| Mar.16-73 | Filed Further Interrogatories. |
| Mar.22-73 | Filed Defendant Goodyear's Interrogatories. |

## DOCKET ENTRIES

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| .29,73 | Filed Memo End. on Unsigned Order. Before Court will consider this application, an affdvt is required from pltffs.m/n & Application of Morris Hirschhorn for pltff pursuant to Rule 3(c)Gen.Rules covering SDNY Weinfeld,J. |
| .9,73 | Filed Memo End. on Order dated 6/9/73. Before Court will consider this application an affdvt is required from the pltffs. Edweinfeld, J. mn |
| 11,73 | Filed Deft. General Motors Corp'Notice. |
| 11,73 | Filed ORDER." " " (over) |
| 11,73 | (Cont'd)Ordered that pltffs in conducting further discovery of deft, Gen. Motors Corp shall restrict their inquiry to subject matters, etc.as ind. Magistrate Schreiber. mn |
| n 7,73 | Filed Memorandum of Law of Deft. General Motors Co. |
| n 7,73 | Filed Order to Show Cause before Judge Weinfeld on 6/12/73, 2:15 P.M. Rm 1106 re: pltffs to produce depositions of I.Robert Ehrlich, Derwyn M.Savery all other experts pltffs consulted, etc.as ind. |
| .18-73 | Filed deft. General Motors Corp., Notice of Entry of an order filed 6-14-73 |
| -30-73 | Filed by deft. General Motors Corp. further interrogs. |
| -30-73 | Filed by deft. General Motots Corp. Answers to interrogs by pltff. |
| 3-15-73 | Filed deft. GM Corp. notice of motion for an order permitting said deft. to amend its answer to assert the affirmative defenses of statute of limitations, etc. ret. on: Aug. 28, 1973. |
| 3-15-73 | Filed affdt. of Roy L. Reardon(atty. for deft. GM Corp.) in support of above motion. |
| 8-15-73 | Filed deft. GM Corp. memorandum of law in support of its motion to amend its answer to the complaint. |
| 8-9-73 | Filed deft. GM Corp. further interrog. to pltf. |
| g.31-73 | Filed pltfs. affdt. in opposition to deft. GM motion to amend its answer. |
| g.31-73 | Filed memo end. on motion dated Aug. 15, 1973 for an order permitting deft. GM Corp. to amend its answer to assert affirmative defenses of statute of limitation and contributory negligence, etc.--- The motion for leave to amend deft. GM Corp answer is granted in view of the rule which requires an amendment to the pleadings shall be freely granted. The court is satisfied that if the pltf. is permitted to take further depositions with respect to the proposed new matter to be set forth in the amended pleadings, it will nto be to the |

DOCKET ENTRIES

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| | prej. of the pltf, provided however that the deft. pays all expenses in connection with the pltf. deposing such addtl. witnesses as may be required in connection with the amended pleading. Deft. also allowed to amend with respect to claim of contributory negligence. So ordered, Weinfeld, J. m/n |
| Sep.4,73 | Filed Notice of Motion and Affidavit Pursuant to Rule 15 F.R.C.P. returnable in Room 36 on Sept. 11, 1973. |
| ept.13-73 | Filed memo end. on defts. A.B. Chance and Pitman Mfg. Co. motion permitting deft. Pitman to amend its answer with the proposed amended answer and deeming deft. Pitman's answer so amended within 10 days after the entry of an order granting motion----Motion dismissed for non-appearance. So ordered, Weinfeld, J. m/n (cwf) |
| p.19-73 | Filed deft. GM Corp. amended answer to complaint. ST&B |
| ep.18,73 | Filed Transcript and record of proceedings dtd 8/28/73 |
| ct-5-73 | Filed Deft. General Motors Corp. Answer to Cross-Complaint. |
| Oct.11,73 | Filed Pltff's Notice of Motion returnable 10/16/73 |
| Oct.11,73 | Filed Pltff's Memorandum of Law in support of Motion purs. to Rule 37 FRCP |
| Oct.15-73 | Filed for Deft. General Motors Corp. Affidavit in Opposition to the Pltffs. motion |
| ov.9-73 | Filed Order re: Motion by Pltffs. for further deposition of Deft. General Motors Corp ordered that interrogatories relating to the expert proof of Pltffs on issued of design be served by G.M. on or before 11/9/73, it is further ordered that Pltffs serve responsive answers to said interrogatories on or before 11/16/73, r and further ordered that in the event the answers to said interrogatories are deemed responsive by Magistrate, as case may be, G.M. shall produce witness for deposition in Detroit, Michigan or New York at the option of GM on mutually date agreeable to the parties. - Schreiber, Mag. |
| ov.9-73 | Filed for Deft. General Motors Corp. Further Interrogatories. |
| c.4-73 | Filed deft. G. M. Corp. answer to pltfs. interrog. |
| c.27-73 | Filed deft. Pitman notice of motion and affdt. for an order permitting sa deft. to commence a 3pty. action for indemnification against pltf's employer, Jersey Central Power and Light Co., etc. ret. on: Jan. 2, 1974. |
| n.2-74 | Filed memorandum of law in support of deft. Pitman Manufacturing Co. in support of its motion. |
| n.3-74 | Filed affdt. of James P. Barrett for deft. GM Corp. in connection with the motion of defts. AB Chance Co. and Pitman Manufacturing Co. for an order permitting impleader of Jersey Central Power and Light Co., owner of the vehicle which is the subject of this action. |
| n.7-74 | Filed pltfs. memorandum of law in opposition to deft. Pitman's motion. |
| n.7-74 | Filed pltfs. affdt. of Morris Hirschhorn in opposition to deft. Pitman's application to implead pltfs. employer as a 3pty. deft. |

DOCKET ENTRIES

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| .7-74 | Filed memo end. on deft. Pitman notice of motion dated Dec. 27,1973 for 3pty. action---Motion is denied on grounds of liber prejudicial delay to pltf. if a 3pty. deft. is now brought into t case. Weinfeld,J.(so ordered) m/n |
| .14-74 | Filed pre trial memorandum of the deft. A. B. Chance Co. and Pitman Manufacturing Co.,a div. thereof. (Mag. Schreiber) |
| .14-74 | Filed stip. and order that action is discontinued and dismissed against deft. GOODYEAR TIRE AND RUBBER CO.,with prej. and without costs. Weinfeld,J. |
| 6-73 | PRE-TRIAL CONFERENCE HELD BY Mag Schreiber |
| 0/13 | PRE-TRIAL CONFERENCE HELD BY Mag Schreiber |
| 14/13 | PRE-TRIAL CONFERENCE HELD BY J Mag. Schreiber |
| .16-74 | Filed pre trial memorandum of deft. GM Corp. |
| -25-74 | Trial begun before Weinfeld,J. and a jury. |
| -26-74 | Trial continued |
| -27-74 | Trial continued |
| -28-74 | Trial continued |
| -1-74 | Trial continued |
| /11/74 | PRE-TRIAL CONFERENCE HELD BY Mag. Schreiber |
| Feb.25-74 | Jury trial began. |
| Feb.26-74 | " " contd. |
| Feb.27-74 | " " " |
| Feb.28-74 | " " " |
| Mar.1-74 | " " " |
| Mar.4-74 | " " " |
| Mar.5-74 | " " " |
| Mar.6-74 | " " " |
| Mar.8-74 | " " " |
| Mar.11-7 | " " " |
| Mar.12-74 | " " " |
| Mar.13-74 | " " " |
| Mar.14-74 | " " " |
| Mar.15-74 | " " " |
| Mar.18-74 | Jury trial contd. and concluded. Special verdict for defts. |
| Mar.20-74 | Filed JUDGMENT--ORDERED that defts. General Motors Corp.,AB Chance Co and Pitman Manufacturing Co. have judgment against pltfs. dismissi the complaint. Clerk. Approved by J. Weinfeld,m/n entered on docket 3/21/74 |
| ar.22-74 | Filed memorandum of GM in support of objection to any comment by counsel for the pltf. relating to the design or placement of the interiro cab door handle so as to avoid or minimize inadvertent door opening. |
| r.29-74 | Filed pltfs. affdt. and notice of motion to set aside the jury verdct for defts. and order a new trial and or for a directed verdict or for a judgment notwithstanding the verdict,etc. ret. on: April 23,1974. |

## DOCKET ENTRIES

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| pr- 5-74 | Filed affdvt. of Harold Lee Schwab on behalf of Pitman in opposition to post trial motion by pltf. |
| -2-74 | PRE-TRIAL CONFERENCE HELD BY Mag. Sakowitz 4/2/74 |
| -5-74 | PRE-TRIAL CONFERENCE HELD BY " " 4-24-74 |
| 8/74 | PRE-TRIAL CONFERENCE HELD BY J. Weinfeld. |
| pr-23-74 | Filed deft. GM Corp.'s memorandum in opposition to pltf's motion to set aside verdict |
| pr-23-74 | Filed deft. GM Corp.'s affdvt. of Roy L. Reardon |
| pr- 8-74 | Filed stip. and order that return date of motion under Rule 59 and 50 is adj. to 4-22-74 -- Weinfeld, J. |
| pr-22-74 | Filed pltf's memorandum in support of motion to set aside verdict |
| ay- 3-74 | Filed pltf's reply affdvt. of Morris Hirschbaum. |
| ay- 9-74 | Filed memo endorsed on pltf's motion to set aside verdict: Motion denied. So ordered -- Weinfeld, J. m/n |
| un 6-74 | Filed pltfs. notice of appeal tothe USCA from a judgment entered on March 20,1974 idsmissing the complaint and denying pltfs. motion to set aside the jury verdict and grant a new trial entered on May 7,1974 and said pltfs. appeal from each and every part of the jury verdict,judgment and denial to set aside said jury verdict and grant a new trial.(copies mailed). |

A TRUE COPY
RAYMOND F. BURGHARDT, Clerk
BY M. Ghent
Deputy Clerk

D. C. 109 Criminal Continuation Sheet

COMPLAINT.

71 CIV. 986

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

----------x

DAVID LANE and MARY ANN LANE, :

Plaintiffs, :

-against- :

GENERAL MOTORS CORPORATION, A.B. CHANCE CO. and PITMAN MANUFACTURING CO., A Division thereof (Herein referred to as Pitman) and GOODYEAR TIRE & RUBBER COMPANY, :

Defendants. :

----------x

COMPLAINT

Plaintiffs Demand Trial by Jury

U.S. DISTRICT COURT FILED MAR 5 - 1971 S.D. OF N.Y.

Plaintiffs, complaining of the defendants, by their attorney, MORRIS HIRSCHHORN, ESQ., respectfully allege upon information and belief:

AS AND FOR A FIRST CAUSE OF ACTION ON BEHALF OF PLAINTIFF, DAVID LANE AGAINST DEFENDANT GENERAL MOTORS CORPORATION.

FIRST: Plaintiff presently resides in this District and defendants are foreign corporations, thereby creating diversity of citizenship; the amount in controversy is in excess of $10,000.00 exclusive of interest and costs and therefore this Honorable Court has jurisdiction herein.

SECOND: That at all the times hereinafter mentioned, defendant General Motors Corporation did and does

business throughout the United States and within this District, in the manufacture and sale of its automobiles, trucks, truck chassis and appurtenances, appliances and equipment thereon.

THIRD: That on and prior to February 4, 1970, plaintiff David Lane was employed as a first class lineman by Jersey Central Power & Light Company.

FOURTH: That at all the times hereinafter mentioned and prior to February 4, 1970, plaintiff's employer purchased from General GMC Sales, Inc. of Bradley Beach, a sales agency and distributor of defendant General Motors Corporation, a 1967 - Model 7500 Truck Chassis ultimately bearing license plate No. XP4759-N.J., which was a product manufactured by defendant General Motors Corporation.

FIFTH: That at all the times hereinafter mentioned, the truck chassis manufactured by said defendant had manufactured and installed thereon by defendant A.B. Chance Co. through its Division, Pitman Manufacturing Co., a mobile hydraulic unit or hoist.

SIXTH: That at all the times hereinafter mentioned and on February 4, 1970, while plaintiff was sitting as a passenger in the cab chassis of the aforesaid truck which was proceeding on Route 9 in Manalapan Township, New Jersey, an incident occured and the said vehicle was caused to go out of control on said public highway, topple over and inflict serious and permanent crippling injuries upon this plaintiff.

COMPLAINT

SEVENTH: That plaintiff's employer and owner of the aforesaid truck, otherwise known in the public utility trade as a digger derrick truck, made known through various means the purpose for which said truck chassis was to be used and relied upon defendant General Motors Corporation, its agents, servants, employees, sales agencies and distributors to sell a truck chassis safe and suitable for the special purposes intended, particularly with regard to engineering, design, stability, maneuverability, roadability, etc., after it had a mobile hydraulic unit or hoist installed thereon.

EIGHTH: That defendant breached its implied warranty of fitness for use because the said truck chassis and its appurtenances, appliances and equipment were in fact not properly and adequately fit for safe, proper and adequate road operation under the aforesaid circumstances and under anticipatable conditions, thereby substantially causing and contributing to the accident and injuries complained of herein.

NINTH: That defendant breached its implied warranty of merchantability in the sale of its truck chassis, including appurtenances, appliances and equipment thereon, because it was not properly and/or adequately usable for the work intended and for which it was manufactured, making this a defective product.

TENTH: That defendant breached its express warranty of fitness for use and merchantability because it

let out into the stream of commerce and industry, a defective product, unsafe and unsuitable for the intended purposes.

ELEVENTH: That defendant is strictly liable in tort as the seller of the product in that said product was defective, unsafe and ultrahazardous in use, invoking the doctrine of absolute liability, separate and distinct from concepts of negligence, implied warranties, express warranties, etc.

TWELFTH: That defendant was careless and negligent in failing to adequately and properly inspect and test the truck chassis for stability, sidesway, roadability, etc. before releasing it via sale to plaintiff's employer.

THIRTEENTH: That defendant was careless and negligent in the premises in that, when the aforesaid truck was caused to go out of control and topple over on its side the chassis cab door sprung open because of certain defects permitting plaintiff to fall partially out, further substantially causing the injuries complained of herein.

FOURTEENTH: That defendant General Motors Corporation, as manufacturer of the truck chassis and its appurtenances, appliances and equipment, was negligent and careless in its duty to use reasonable care in the design and/or engineering and/or layout and arrangement of the truck chassis, tires, rear axle and chassis cab door,

COMPLAINT

which would fairly meet any anticipatable road conditions and driver reaction thereto, thereby substantially causing and contributing to the incident and injuries complained of herein.

FIFTEENTH: That defendant was further careless and negligent in violating certain sections of the National Traffic and Motor Vehicles Safety Act of 1966 found to be applicable hereafter and is liable to plaintiff in substantial monetary damages.

SIXTEENTH: Plaintiff was not negligent nor contributed in any way in bringing about the incident and injuries complained of herein.

SEVENTEENTH: That as a result of the foregoing, plaintiff was caused to sustain serious and permanent personal injuries and was rendered sick, sore, lame and disabled, requiring hospitalization and medical and surgical care and attention, in the past, present and future and was and is prevented from performing his usual occupation, all to his damage in the sum of TWO MILLION FIVE HUNDRED THOUSAND ($2,500,000.00) DOLLARS.

AS AND FOR A SECOND CAUSE OF ACTION ON BEHALF OF PLAINTIFF DAVID LANE AGAINST A.B. CHANCE CO. and PITMAN MANUFACTURING CO., A Division thereof (Herein Referred to as Pitman).

EIGHTEENTH: Plaintiff repeats and realleges

each and every allegation numbered FIRST through SEVENTEENTH as though set forth in detail herein.

NINETEENTH: That at all the times hereinafter mentioned, A.B. Chance Co. and Pitman Manufacturing Co., a division thereof, does business in various parts of the United States and within this District and was in the business of manufacturing, distributing and selling mobile hydraulic units or hoists which were built upon truck chassis.

TWENTIETH: That plaintiff's employer, Jersey Central Power & Light Company, retained defendant Pitman to construct, manufacture and install a safe, proper and adequate mobile hydraulic unit or superstructure atop the aforesaid truck chassis manufactured by defendant General Motors Corporation, to be used for special duty purposes.

TWENTY-FIRST: That plaintiff's employer was induced by this defendant's representations, to purchase the aforesaid superstructure on the grounds that Pitman was a specialist in this type of work and that Jersey Central Power & Light Company could and did rely upon defendant for a safe, proper and adequate product and all details of adequate, proper and safe design and engineering of the hoist were delegated to defendant Pitman.

TWENTY-SECOND: That plaintiff's employer relied upon the professional skill and judgment and engineering of defendant Pitman, in manufacturing a product free from any engineering, design, stability or roadability defects, etc.

COMPLAINT

TWENTY-THIRD: That defendant Pitman furnished plaintiff's employer a defective product, unsafe and unsuited for the special purposes intended.

TWENTY-FOURTH: That defendant Pitman was careless and negligent in accepting a 1967 GMC Truck Chassis bearing Serial No. D3312G, including appurtenances, appliances and equipment, because it was unfit and unsuited for having this mobile hydraulic unit superstructure designed, engineered, manufactured and installed thereon.

TWENTY-FIFTH: That if it is claimed the GMC Truck Chassis, including appurtenances, appliances and equipment was fit, sound and suited for the installation of the hoist superstructure by defendant Pitman, then said defendant was grossly negligent and careless in so defectively designing, engineering, manufacturing and installing the superstructure, as to make it dangerous, unsafe and unsound for certain anticipatable driving conditions, including the conditions which were present at the time of the incident complained of herein.

TWENTY-SIXTH: That defendant Pitman was careless and negligent in the design and engineering of its mobile hydraulic unit or hoist superstructure installed upon the aforesaid GMC chassis, under the conditions it was delivered, for installation, particularly with regard to stability, sidesway, roadability and maneuverability under certain anticipatable conditions, etc.

COMPLAINT

TWENTY-SEVENTH: That defendant Pitman was careless and negligent in failing to issue proper and/or adequate driver instructions and precautions to the buyer, plaintiff's employer and its employees, insofar as driving characteristics, stability, sidesway, bottoming out, roadability, maneuverability, etc., were concerned, which were reasonably anticipatable.

TWENTY-EIGHTH: That defendant Pitman was careless and negligent in failing to adequately and properly inspect and test the aforesaid truck vehicle before releasing it for use to plaintiff's employer, which included the installation of poles to carry high tension wires, etc.

TWENTY-NINTH: That defendant Pitman breached its implied warranty of fitness for use and/or merchantability because the said mobile hydraulic unit superstructure, as applied and installed on the truck chassis, made it improper inadequate and unsafe under certain anticipatable conditions, thereby substantially causing and contributing to the incident and injuries complained of herein.

THIRTIETH: That defendant Pitman breached its express warranties accompanying the sale of the mobile hydraulic unit.

THIRTY-FIRST: That defendant Pitman is strictly liable in tort as the seller of the unit manufactured and installed on the truck chassis in that said product was defective, unsafe and ultrahazardous in use, under the anticipatable conditions that existed at the time the aforesaid truck was caused to go out of control and inflict

serious injury upon plaintiff David Lane on February 4, 1970 thereby invoking the doctrine of strict and/or absolute liability.

THIRTY-SECOND: That plaintiff was in no way negligent or contributorily at fault in bringing about the incident and injuries complained of herein.

THIRTY-THIRD: That as a result of the foregoing, plaintiff was caused to sustain serious and permanent personal injuries and was rendered sick, sore, lame and disabled, requiring hospitalization and medical and surgical care and attention, in the past, present and future and was and is prevented from performing his usual occupation, all to his damage in the sum of TWO MILLION FIVE HUNDRED THOUSAND ($2,500,000.00) DOLLARS.

AS AND FOR A THIRD CAUSE OF ACTION ON BEHALF OF PLAINTIFF DAVID LANE AGAINST DEFENDANT GOODYEAR TIRE & RUBBER COMPANY.

THIRTY-FOURTH: Plaintiff repeats and realleges each and every allegation numbered FIRST through THIRTY-THIRD as though set forth in detail herein.

THIRTY-FIFTH: Defendant Goodyear was careless and negligent in failing to issue adequate, sufficient and/or proper instructions and directives for use and/or application of its Super-Single Tires upon various truck chassis, particularly in the class and size of 18x22.5 - 16 ply tires.

COMPLAINT

THIRTY-SIXTH: That defendant was careless and negligent in failing to adequately and properly warn of the dangers involved in the use of their truck tires, as alleged previously.

THIRTY-SEVENTH: That defendant failed to adequately and/or properly road test their truck tires, when installed upon various truck chassis, insofar as stability, roadability, sidesway, etc. thereby ultimately and substantially leading to the injuries complained of herein.

THIRTY-EIGHTH: That defendant breached its implied warranty of fitness for use and/or merchantability insofar as its Super-Single truck tires, size 18x22.5 - 16 ply and otherwise designated as the Super-Single Hi-Miler and the Super-Single Road Lug.

THIRTY-NINTH: That defendant breached its express warranties insofar as its Super-Single truck tires, size 18x22.5 - 16 ply and otherwise designated as the Super-Single Hi-Miler and the Super-Sirgle Road Lug.

FORTIETH: Plaintiff was in no way negligent or contributorily at fault in bringing about the incident and injuries complained of herein.

FORTY-FIRST: That as a result of the foregoing, plaintiff was caused to sustain serious and permanent personal injuries and was rendered sick, sore, lame and

disabled, requiring hospitalization and medical and surgical care and attention, in the past, present and future and was and is prevented from performing his usual occupation, all to his damage in the sum of TWO MILLION FIVE HUNDRED THOUSAND ($2,500,000.00) DOLLARS.

AS AND FOR A FOURTH CAUSE OF ACTION
ON BEHALF OF PLAINTIFF MARY ANN LANE

FORTY-SECOND: Plaintiff, Mary Ann Lane, repeats and realleges each and every allegation numbered FIRST through FORTY-FIRST as though set forth in detail herein.

FORTY-THIRD: That at all the times mentioned herein plaintiff Mary Ann Lane was and still continues to be the wife of plaintiff David Lane and as such wife has lived and cohabited with her husband and that prior to the time complained of herein, plaintiff David Lane was in good health and sound physical condition.

FORTY-FOURTH: That by reason of the foregoing, plaintiff Mary Ann Lane has lost and will in the future lose the society, companionship and services of her husband and plaintiff David Lane, being required to undergo continuous extensive medical and surgical care in the future, as well as in the past and being permanently disabled, will so damage this plaintiff in her loss of consortium that she respectfully prays for an award in the sum of FIVE HUNDRED THOUSAND ($500,000.00) DOLLARS.

COMPLAINT

WHEREFORE, plaintiff David Lane demands judgment against the defendants jointly and/or severally in the sum of TWO MILLION FIVE HUNDRED THOUSAND ($2,500,000.00) DOLLARS and plaintiff Mary Ann Lane demands judgment against the defendants jointly and/or severally in the sum of FIVE HUNDRED THOUSAND ($500,000.00) DOLLARS, together with the costs and disbursements of this action.

MORRIS HIRSCHHORN, ESQ.
Attorney for Plaintiffs
17 Battery Place
New York, New York 10004
HA 5-4330

ANSWER OF DEFENDANT GENERAL MOTORS CORPORATION.

UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF NEW YORK

| | |
|---|---|
| DAVID LANE and MARY ANN LANE, Plaintiffs, -against- GENERAL MOTORS CORPORATION, A. B. CHANCE CO., and PITMAN MANUFACTURING CO., a Division Thereof (Herein referred to as Pitman) and GOODYEAR TIRE & RUBBER COMPANY, Defendants. | ANSWER TO COMPLAINT<br>71 Civ. 986 |

Defendant, General Motors Corporation ("General Motors"), answering the complaint of the plaintiffs, by its attorneys, Simpson Thacher & Bartlett, respectfully alleges as follows:

ANSWERING THE FIRST CAUSE OF ACTION

1. Denies that it has any knowledge or information sufficient to form a belief with respect to the truth of each and every allegation contained in paragraphs "FIRST", "THIRD", "FOURTH", "FIFTH", "SIXTH" and "SEVENTH" of the complaint.

2. Denies each and every allegation contained in paragraph "SECOND" of the complaint, except admits that General Motors manufactured and assembled new motor vehicles, including cabs and chassis for trucks.

ANSWER OF DEFENDANT GENERAL MOTORS CORPORATION

3. Denies each and every allegation contained in paragraphs "EIGHTH", "NINTH", "TENTH", "ELEVENTH", "TWELFTH", "THIRTEENTH", "FOURTEENTH", "FIFTEENTH", "SIXTEENTH" and "SEVENTEENTH" of the complaint.

ANSWERING THE SECOND CAUSE OF ACTION

4. Repeats and reiterates each and every answer made to the paragraphs referred to in paragraph "EIGHTEENTH" of the complaint.

5. Denies that it has any knowledge or information sufficient to form a belief with respect to the truth of each and every allegation contained in paragraphs "NINETEENTH", "TWENTIETH", "TWENTY-FIRST", "TWENTY-SECOND", "TWENTY-THIRD", "TWENTY-FOURTH", "TWENTY-FIFTH", "TWENTY-SIXTH", "TWENTY-SEVENTH", "TWENTY-EIGHTH", "TWENTY-NINTH", "THIRTIETH" and "THIRTY-FIRST" of the complaint.

6. Denies each and every allegation contained in paragraphs "THIRTY-SECOND" and "THIRTY-THIRD" of the complaint.

ANSWERING THE THIRD CAUSE OF ACTION

7. Repeats and reiterates each and every answer made to the paragraphs referred to in paragraph "THIRTY-FOURTH" of the complaint.

8. Denies that it has any knowledge or information sufficient to form a belief with respect to the truth of

each and every allegation contained in paragraphs "THIRTY-FIFTH", "THIRTY-SIXTH", "THIRTY-SEVENTH", "THIRTY-EIGHTH" and "THIRTY-NINTH" of the complaint.

9. Denies each and every allegation contained in paragraph "FORTIETH" and "FORTY-FIRST" of the complaint.

ANSWERING THE FOURTH CAUSE OF ACTION

10. Repeats and reiterates each and every answer made to the paragraphs referred to in paragraph "FORTY-SECOND" of the complaint.

11. Denies that it has any knowledge or information sufficient to form a belief with respect to the truth of each and every allegation contained in paragraph "FORTY-THIRD" of the complaint.

12. Denies each and every allegation contained in paragraph "FORTY-FOURTH" of the complaint.

AS AND FOR ITS CROSS-CLAIM AGAINST THE DEFENDANTS, A. B. CHANCE CO. AND PITMAN MANUFACTURING CO., A DIVISION THEREOF AND GOODYEAR TIRE & RUBBER COMPANY, THE DEFENDANT GENERAL MOTORS CORPORATION, ALLEGES AS FOLLOWS:

13. That if the plaintiffs were caused to sustain the damages described in the complaint at the time and place set forth in the complaint and in the manner alleged in the complaint, through any carelessness, recklessness or negligence other than the contributory negligence of the

plaintiff, David Lane, said damages were caused by reason of the sole, active and primary negligence of the defendants, A. B. Chance Co. and Pitman Manufacturing Co., a Division Thereof, and Goodyear Tire & Rubber Company in the manufacture of those portions of the truck referred to in the complaint that were not manufactured by the defendant, General Motors Corporation.

14. That if the plaintiffs were caused to sustain the damages as alleged in the complaint and in the manner alleged in the complaint through a breach of warranty then said breach was occasioned by defects in manufacture and/or design of those portions of the truck referred to in the complaint that were not manufactured by the defendant, General Motors Corporation.

15. That by reason of the foregoing, if the defendant, General Motors Corporation, will be liable to the plaintiffs then such liability will have been incurred by the negligence and/or breach of warranty of the defendants, A. B. Chance Co. and Pitman Manufacturing Co., a Division Thereof and Goodyear Tire & Rubber Company and the said defendants will be bound to indemnify the defendant, General Motors Corporation, to the extent of all amounts the plaintiffs may recover against the defendant, General Motors Corporation, together with the costs and disbursements of this action, including attorneys' fees.

ANSWER OF DEFENDANT GENERAL MOTORS CORPORATION

WHEREFORE, the defendant, General Motors Corporation, demands that the complaint of the plaintiffs be dismissed and that the ultimate rights of all the defendants as among themselves be determined in the event that the plaintiffs recover against the defendant, General Motors Corporation, that the said defendant have judgment over and against the defendants, A. B. Chance Co. and Pitman Manufacturing Co., a Division Thereof and Goodyear Tire & Rubber Company, together with the costs, disbursements and attorneys' fees of this action.

SIMPSON THACHER & BARTLETT
Attorneys for Defendant,
General Motors Corporation
Office and P. O. Address
One Battery Park Plaza
New York, New York 10004
483-9000

AMENDED ANSWER OF DEFENDANT GENERAL MOTORS CORPORATION.

UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF NEW YORK

| | |
|---|---|
| DAVID LANE and MARY ANN LANE, Plaintiffs, -against- GENERAL MOTORS CORPORATION, A. B. CHANCE CO., and PITMAN MANUFACTURING CO., a Division Thereof (Herein referred to as Pitman) and GOODYEAR TIRE & RUBBER COMPANY, Defendants. | AMENDED ANSWER TO COMPLAINT 71 Civ. 986 (E.W.) |

Defendant, General Motors Corporation ("General Motors"), answering the complaint of the plaintiffs, by its attorneys, Simpson Thacher & Bartlett, respectfully alleges as follows:

ANSWERING THE FIRST CAUSE OF ACTION

1. Denies that it has any knowledge or information sufficient to form a belief with respect to the truth of each and every allegation contained in paragraphs "FIRST", "THIRD", "FOURTH", "FIFTH", "SIXTH" and "SEVENTH" of the complaint.

2. Denies each and every allegation contained in paragraph "SECOND" of the complaint, except admits that General Motors manufactured and assembled new motor vehicles, including cabs and chassis for trucks.

AMENDED ANSWER OF DEFENDANT GENERAL MOTORS CORPORATION

3. Denies each and every allegation contained in paragraphs "EIGHTH", "NINTH", "TENTH", "ELEVENTH", "TWELFTH", "THIRTEENTH", "FOURTEENTH", "FIFTEENTH", "SIXTEENTH" and "SEVENTEENTH" of the complaint.

ANSWERING THE SECOND CAUSE OF ACTION

4. Repeats and reiterates each and every answer made to the paragraphs referred to in paragraph "EIGHTEENTH" of the complaint.

5. Denies that it has any knowledge or information sufficient to form a belief with respect to the truth of each and every allegation contained in paragraphs "NINETEENTH", "TWENTIETH", "TWENTY-FIRST", "TWENTY-SECOND", "TWENTY-THIRD", "TWENTY-FOURTH", "TWENTY-FIFTH", "TWENTY-SIXTH", "TWENTY-SEVENTH", "TWENTY-EIGHTH", "TWENTY-NINTH", "THIRTIETH" and "THIRTY-FIRST" of the complaint.

6. Denies each and every allegation contained in paragraphs "THIRTY-SECOND" and "THIRTY-THIRD" of the complaint.

ANSWERING THE THIRD CAUSE OF ACTION

7. Repeats and reiterates each and every answer made to the paragraphs referred to in paragraph "THIRTY-FOURTH" of the complaint.

8. Denies that it has any knowledge or information sufficient to form a belief with respect to the truth of

AMENDED ANSWER OF DEFENDANT GENERAL MOTORS CORPORATION

each and every allegation contained in paragraphs "THIRTY-FIFTH", "THIRTY-SIXTH", "THIRTY-SEVENTH", "THIRTY-EIGHTH" and "THIRTY-NINTH" of the complaint.

9. Denies each and every allegation contained in paragraphs"FORTIETH" and "FORTY-FIRST" of the complaint.

ANSWERING THE FOURTH CAUSE OF ACTION

10. Repeats and reiterates each and every answer made to the paragraphs referred to in paragraph "FORTY-SECOND" of the complaint.

11. Denies that it has any knowledge or information sufficient to form a belief with respect to the truth of each and every allegation contained in paragraph "FORTY-THIRD" of the complaint.

12. Denies each and every allegation contained in paragraph "FORTY-FOURTH" of the complaint.

AS AND FOR A FIRST COMPLETE, SEPARATE AND AFFIRMATIVE DEFENSE TO THE FIRST AND FOURTH CAUSES OF ACTION ALLEGED IN THE COMPLAINT, INSOFAR AS SAID CAUSES OF ACTION ARE BASED ON BREACH OF WARRANTY AND STRICT LIABILITY, THE DEFENDANT GENERAL MOTORS ALLEGES AS FOLLOWS:

13. The said causes of action were not commenced within the time period prescribed by law and are time barred by the applicable period of limitations.

AMENDED ANSWER OF DEFENDANT GENERAL MOTORS CORPORATION

AS AND FOR A SECOND COMPLETE, SEPARATE AND AFFIRMATIVE DEFENSE TO THE FIRST AND FOURTH CAUSES OF ACTION ALLEGED IN THE COMPLAINT, THE DEFENDANT GENERAL MOTORS ALLEGES AS FOLLOWS:

14. The plaintiff David Lane was contributorily negligent.

AS AND FOR ITS CROSS-CLAIM AGAINST THE DEFENDANTS, A. B. CHANCE CO. AND PITMAN MANUFACTURING CO., A DIVISION THEREOF AND GOODYEAR TIRE & RUBBER COMPANY, THE DEFENDANT GENERAL MOTORS CORPORATION, ALLEGES AS FOLLOWS:

15. That if the plaintiffs were caused to sustain the damages described in the complaint at the time and place set forth in the complaint and in the manner alleged in the complaint, through any carelessness, recklessness or negligence other than the contributory negligence of the plaintiff, David Lane, said damages were caused by reason of the sole, active and primary negligence of the defendants, A. B. Chance Co. and Pitman Manufacturing Co., a Division Thereof, and Goodyear Tire & Rubber Company in the manufacture of those portions of the truck referred to in the complaint that were not manufactured by the defendant, General Motors Corporation.

16. That if the plaintiffs were caused to sustain the damages as alleged in the complaint and in the manner alleged in the complaint through a breach of warranty then

said breach was occasioned by defects in manufacture and/or design of those portions of the truck referred to in the complaint that were not manufactured by the defendant, General Motors Corporation.

17. That by reason of the foregoing, if the defendant, General Motors Corporation, will be liable to the plaintiffs then such liability will have been incurred by the negligence and/or breach of warranty of the defendants, A. B. Chance Co. and Pitman Manufacturing Co., a Division Thereof and Goodyear Tire & Rubber Company and the said defendants will be bound to indemnify the defendant, General Motors Corporation, to the extent of all amounts the plaintiffs may recover against the defendant, General Motors Corporation, together with the costs and disbursements of this action, including attorneys' fees.

WHEREFORE, the defendant, General Motors Corporation, demands that the complaint of the plaintiffs be dismissed and that the ultimate rights of all the defendants as among themselves be determined in the event that the plaintiffs recover against the defendant, General Motors Corporation, that the said defendant have judgment over and against the defendants, A. B. Chance Co. and Pitman

AMENDED ANSWER OF DEFENDANT GENERAL MOTORS CORPORATION

Manufacturing Co., a Division Thereof and Goodyear Tire & Rubber Company, together with the costs, disbursements and attorneys' fees of this action.

SIMPSON THACHER & BARTLETT

By Roy L. Reardon
A Member of the Firm

Attorneys for Defendant,
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One Battery Park Plaza
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483-9000

EXCERPTS FROM TRANSCRIPT.

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THE COURT: Gentlemen, twenty minutes each. Watch your time, please.

Mr. Walkup.

MR. WALKUP: Your Honor, Judge Weinfeld, counsel, members of the jury and alternates:

I will be as brief as I can to help you outline the evidence here as we expect it to be.

Mr. Hirschhorn and I represent David Lane and his wife, Mary Ann. He was thirty years old when he was injured, four years ago, February 4th of 1970. His wife was then twenty-nine. They have three children, aged two, seven and nine years of age at that time.

In a nutshell -- and his Honor has already told you some of the basic facts, but in a nutshell this is a case against the manufacturer, or two manufacturers of a large truck vehicle with a crane on the back of it that was involved in the turnover accident in New Jersey under a snow and ice condition on a roadway.

Dave Lane was not the driver but was seated in the right hand passenger side of the front cab of the vehicle, and as a result of the turnover and the popping open of the door next to him in the turnover he was injured and received an injury to his lower spine which resulted in paraplegia, which I will explain briefly in a moment.

* * *

JGP 4

The quotation came not to Jersey Central Power but came to General Motors from Hendrickson to put on these tires, which are called super singles. They are balloons. They are doughnuts, or various names that are used for them.

And also in connection with this modification of this unique, one-of-a-kind vehicle, the back axle, wide and stable, had the super singles put on it, when then reduced the width of the back, giving it less stability in operation, because there had been a moving in of the back tires and, at the same time a heightening of the center of gravity of the chassis, because these tires are much bigger around and therefore higher than the normal 10 by 20's that run, and these are -- the exact numbers escape me, but you will see that they are mammoth tires, and the net result was, when the chassis left General Motors, it had the standard duals on the back and the singles on the front, but by the time Hendrickson got through with it, in accordance with their quotation to General Motors, they put these super singles on the front and back, so it only had four tires instead of six; it had a higher center of gravity, and also they changed the front axle to a four-wheel drive vehicle rather than the original one that General Motors turned out.

Now, after Hendrickson finished with its modifica-

* * *

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R I C H A R D A . D A N C I S I N , called as a witness by the plaintiff, being first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. WALKUP:

Q Mr. Dancisin, by whom are you employed, sir?

A The New Jersey State Police.

Q How long have you been so employed?

A At this time, seven years.

Q And in what position or capacity?

A A trooper.

Q And were you one of the New Jersey State Troopers who had occasion to investigate an accident which occurred on June 4 of 1970 involving a Jersey Central Power Company truck and trailer?

A Yes, sir.

Q And at that time were you the one in charge of the investigation?

A Yes, sir.

Q Do you have a copy of your report of that accident available?

A Yes, sir, I do.

Q For accuracy, referring to that, can you tell us, sir, the time that you first learned of this accident?

A 8:45 a.m., in the morning.

Q And will you tell us, sir, where you were at that time?

A I was on routine patrol. I couldn't give you any exact location.

Q And did you drive to the scene of the accident?

A Yes, sir.

Q And will you tell us, sir, what the weather conditions were on that day?

A The weather was clear, but the roads had been wet and they were very icy.

Q When you say "clear," do you infer by that the snow was not at that time falling?

A Yes, sir.

Q Snow had fallen then previously, had it?

A Yes, sir, it had.

Q And do you know when the snow had last fallen?

A I don't recall at this time.

Q And the conditions of the highway, would you describe them, sir, as to slipperiness or otherwise?

A Yes, sir, they were very slippery.

Q And had you, yourself, made any calls or requested anything to be put on the pavement because of the slippery condition?

A Yes, sir. I had requested sand trucks for the entire roadway.

Q And by the entire roadway, are you referring now to the highway where it happened?

A Yes, sir, U. S. 9.

Q And that highway is what?

A U. S. 9.

Q And up to the time that the accident happened, had the sand trucks come out and put the sand on?

A I don't believe so at this particular point.

Q All right.

Now, can you describe for us, please, the type of roadway where the accident happened, that is, what direction it ran, how many lanes, what type of median, etcetera?

A Yes, sir. It is -- the highway travels north and southbound. It has four lanes, with a macadam shoulder and a grass island between the lanes, two lanes northbound and two lanes southbound.

Q At the time that accident occurred, was the grass on the divider visible or was it covered by snow?

A I really can't recall.

Q All right.

And did you measure, in the course of your

investigation, either accurately or estimating, the width of the two northbound lanes respectively?

A They are twelve-foot lanes, approximately.

Q And did you, in the course of your investigation, measure or determine the approximate width of the center divider?

A Approximately ten feet.

Q Now, are these actual tape measurements or estimates?

A They are estimates.

Q Did you also, in the course of your investigation, determine whether or not there is a curb between the traveling northbound lanes and the center divider?

A Yes, sir, there is a curb.

Q And did you determine either by estimating or measuring, the height of that curb and the type of that curb?

A No, sir, I didn't measure the curb.

Q Do you have an estimate as to the approximate height of the curb?

A Recollection from working the area. It is approximately four to six inches high, I would say.

Q Now, when you arrived at the scene of the accident, what did you discover there in the way --

A When I arrived at the scene, the truck was flipped

over on its right side. It was facing west, and I tended to the injured people at the scene and requested the First Aid Squad.

Q Were some photographs taken there at the scene of the accident or during the course of the investigation?

A Not by the State Police.

Q Have you since seen photographs of the scene of the accident that were taken by someone?

A Yes, sir.

Q All right.

And I'm now going to hand you, sir, an exhibit which has been marked 57 for identification, and with it, this is a black and white enlargement, but with it a small color photo of the same scene, and I will ask you, sir, if you will look at that, and does that view fairly portray and depict the conditions of the roadway and the snow and the curb and the truck on its side when you arrived there?

A Yes, sir.

MR. WALKUP: All right. I'll offer that. I guess it is already an exhibit. But it would be the first one in the trial.

It has two sets of numbers on it. One says it is 57 and one says it is 58.

THE CLERK: This has been marked 58.

THE CLERK: This has been marked 57.

MR. WALKUP: May I offer then 57, the enlargement, and also the color photo of the same as one exhibit, your Honor?

THE COURT: Any objection?

MR. SCHWAB: May I see it, if your Honor please?

(Pause)

MR. SCHWAB: No objection.

MR. REARDON: I have no objection.

(Plaintiff's Exhibits 57 and 57A for identification were received in evidence.)

BY MR. WALKUP:

A I am going to show you another large black and white photo with a smaller color photo of the same subject matter, and ask you to look at those. Do those fairly and accurately portray the general conditions of the roadway and the snow and the overturned vehicle there at the scene of the accident?

A Yes, sir.

MR. WALKUP: I will offer that, then, in evidence, and it is marked on the back, at this time on the large one, 58 for identification.

MR. REARDON: No objection.

MR. SCHWAB: No objection. We already saw them.

xx (Plaintiff's Exhibits 58 and 58A for identification were received in evidence.)

Q I show you now two smaller colored photographs and ask you, sir, to kindly look at those. Do those also fairly and accurately show the general conditions of the roadway and the snow and the area there at the scene?

A Yes, sir.

Q And in those views, do you see an intersection appearing?

A Yes, sir, I do.

Q And what was the name of that intersection?

A On the side that the accident occurred, it is the intersection of Route 9 and Taylors Mills Road.

Q Did you determine, in the course of your investigation, in which direction the Jersey Central Power vehicle had been proceeding prior to the accident?

A Northbound.

Q And the Taylors Mills Road intersection, which you see there, is in which direction from the scene of the accident?

A East. In other words, the eastbound side of the intersection is Taylors Mills Road.

Q Well, to put it in a more direct and understandable situation, if the Jersey Central vehicle had not had the

accident and turned over as the photograph shows, it would have then proceeded northbound to the Taylors Mills Road intersection, correct?

A Right.

Q And did you determine, sir, approximately how far in feet or yards the vehicle ended up from that intersection?

A Approximately 200 feet.

Q 200 feet?

A South of the intersection is where the accident occurred.

Q Of Taylors Mills Road.

MR. WALKUP: I offer these next two colored photographs as the next exhibit.

MR. REARDON: No objection.

MR. SCHWAB: No objection.

MR. WALKUP: These do not have a number on the back of them, for some reason. So that I would offer them as the next in order.

(Plaintiff's Exhibits 86 and 87 were received in evidence.)

THE COURT: Where was the vehicle? On the west side of the road?

THE WITNESS: It came to rest partially on the middle grass divider and partially in the left southbound

lane.

THE COURT: That would be the west side, wouldn't it?

THE WITNESS: It was north and southbound. It would be in the west, right, the west lane.

MR. WALKUP: May I at this time, your Honor, request permission to pass these pictures to the jury so they can see the roadway conditions.

THE COURT: Yes. They are in evidence. You may.

(Pause)

Q As part of your investigation and on the report that you have there, did you make a diagram of certain positions as determined by your investigation?

A Yes, sir.

Q And is that part of the form that you have to fill out, to make a diagram?

A Yes, sir.

MR. WALKUP: That report as to pertinent portions has been marked as an exhibit for identification, your Honor. And we have an enlargement made of that portion of the report which shows the diagram, for convenience of the jury and the Court. By stipulation of counsel, may I put this on the board and offer it as the same exhibit number as the report itself has for identification?

MR. REARDON: May I ask, is counsel going to offer the report?

MR. WALKUP: I am going to offer the pertinent portions of the report, yes.

MR. SCHWAB: May it please the Court, I believe I would object to this procedure unless we first ascertain the portions of the report that are going into evidence.

THE COURT: I think so.

Are you taking selected portions of the report?

MR. WALKUP: Taking the diagram from the report, your Honor. There are some legal questions about some parts of the report which should be taken up in chambers, I believe.

MR. SCHWAB: There are areas that I wish to comment on, your Honor, but I don't wish to do it in front of the jury. I think the Court would want me not to.

THE COURT: Well, why don't I excuse the jury now and we will resume at 2 o'clock. I guess it will take a few minutes anyway. Usually I recess about twenty to one or a quarter to one.

All right, I will hear you now, and the jury can go to lunch.

(The jury left the courtroom.)

THE COURT: What is the problem, gentlemen?

MR. SCHWAB: May it please the Court, the point that I wish to make is that the drawing which Mr. Walkup was about to use actually represents the officer's reconstruction of the attitude, if you will, of the vehicle during the skid pattern, that is, the officer's reconstruction. I have no objection to that going into evidence, provided the other portions of the report, which also establish the officer's reconstruction of the accident, also go into evidence.

In that regard, I would like to say, however, your Honor, there is reference in the report to a careless driving summons and disposition on that. I certainly do not suggest that that should go into evidence at all. But elsewhere in the report where there is reconstruction by the officer, I think all of that should go into evidence rather than only selected portions of the accident reconstruction.

THE COURT: Which are the portions that you agree should be excluded? We can dispose of that first.

MR. SCHWAB: The bottom --

THE COURT: Would that be on the final report, careless driving?

MR. SCHWAB: Yes, your Honor.

THE COURT: On page 2, that is to be omitted?

MR. SCHWAB: Yes. The bottom of the second page. I can't make out what block that is.

jgrm 46 Dancisin

MR. REARDON: Block 107, I think.

THE COURT: I do not see any block number at all.

MR. SCHWAB: It is right to the left --

THE COURT: It is the final report. Are we talking about the same thing? Come up here.

THE WITNESS: No, sir. The one before that, the page before that, on the bottom.

MR. SCHWAB: I am referring to page 2, your Honor, of the report.

THE COURT: This is what I am referring to.

MR. SCHWAB: We have a missing page, then, in what has been given to your Honor.

MR. REARDON: No. His Honor has that as the next page, I think.

THE COURT: Do I have a copy of what you all have?

MR. REARDON: Yes, you do.

THE COURT: Tell me what you want.

MR. SCHWAB: On the page that has the diagram, your Honor --

THE COURT: I have that page. Oh, the third page.

MR. REARDON: Down at the bottom, under 107, your Honor, "careless driving."

MR. SCHWAB: If I may point to it (indicating).

THE COURT: You agree that's to be omitted?

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MR. REARDON: I do.

MR. WALKUP: I would take it it is completely inadmissible.

THE COURT: Then you are in agreement on it.

MR. WALKUP: Yes.

THE COURT: What is the next?

MR. SCHWAB: Other than that, I think the first page of the report and my second page, which has the drawing --

THE COURT: How is it yours is in the second page and --

MR. REARDON: It is just a Xerox, your Honor. I had Mr. Castellano hand you that.

THE COURT: What could you object to?

MR. WALKUP: I object also, your Honor, to this portion just above the diagram where it says, "contributing circumstance: too fast for conditions," as again being the same thing as the careless driving and inadmissible, and I move to strike that.

And also the third page, which relates to the careless driving hearing, where he was acquitted.

THE COURT: I suggested that myself when I saw that.

Then the only item open, as I understand you, is

your request that "too fast for conditions" go out.

MR. WALKUP: Correct, your Honor.

MR. REARDON: I would urge that that go in, your Honor. This is part of the investigation by the officer.

THE COURT: He wasn't present. He made an observation there with respect to the investigation at the time. He arrived there. We will allow that in there. I suppose you could argue under 1732, Title 28, it should go in. But I am going to eliminate it. It is a matter of opinion by the officer.

So what we will eliminate, then, is what you have agreed upon -- I wish somebody would give me these papers in order so we can follow it -- the word "careless driving" on the bottom of what is before me is page 3 but page 2 in the others; also the section referring or captioned "final report" with its reference to careless driving; and also that part of the report which, alongside of contributing circumstance, has "too fast for conditions."

MR. SCHWAB: May I suggest to the Court most respectfully that that third page, which on your Honor's copy is the second page, should be removed physically? I don't think it serves any useful purpose.

MR. WALKUP: I have no objection whatsoever.

MR. REARDON: I join in that.

jgrm 48a Dancisin-

THE COURT: All right. Then that is settled. All right. We will take the luncheon recess.

(Luncheon recess.)

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AFTERNOON SESSION

2:00 p.m.

R I C H A R D A. D A N C I S I N, resumed.

CONTINUED DIRECT EXAMINATION

BY MR. WALKUP:

Q Officer Dancisin, we know you have on the black board, as you can see, an enlargement of your report diagram.

Would it be permissible, your Honor --

THE COURT: Do you want him to step down?

MR. WALKUP: Yes, your Honor.

Q Point on this and let me ask specific questions, if I may.

First of all, have you indicated the north on this diagram?

A (Indicating)

Q And that is by the arrow. So that would be northbound?

A Yes.

Q And you have indicated the width of the two lanes, have you, northbound lanes?

A Yes, sir.

Q And that is what?

Q Twelve feet each.

Q And the grass island you have indicated is ten

feet.

A Yes.

THE COURT: Can you get to the other side of that? You are blocking my view. Stand alongside of counsel, if you can do it that way.

Q Did you draw in there on your diagram the vehicle and its approximate point of rest?

A Yes, sir.

Q And we'll start there. Would you point to that on the diagram.

A Here (indicating).

Q And have you indicated on there which way the wheels were?

A I have indicated that the vehicle, when it came to rest, was facing -- in other words, the front of the vehicle was facing west.

Q And was it on the side? Is that what you have indicated there?

A Right side, yes.

Q And behind it you have another object. What is that?

A Utility trailer.

Q All right. And was the trailer on its side or upright or what?

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A I believe it was upright.

Q Now, then you have indicated coming south from that another diagram. What does that indicate?

A This is the vehicle prior to the accident (indicating).

Q No. Starting back at the other end, if you will work backwards.

A This is the vehicle as it is in the skid before it goes on its side, indicated by the arrow.

This is in the skid (indicating).

Q You have indicated there the front of the vehicle on each of those two. Would you point to the front?

A Here (indicating).

Q And are those indicating the left front tire and the right front tire?

A This would be the left front of the vehicle, this would be the right front here (indicating).

Q And the utility trailer is designated in each instance by that same symbol that you used in the at rest position? Correct?

A Upright.

Q And the arrow that you put on there between the last two marks we have talked about, what does that indicate?

A This arrow (indicating)/

Q Yes. Take that one first.

A This one indicates that the vehicle did roll over on its side, by the loop.

This is just the direction of travel, sidewise more or less (indicating).

Q All right. And then you have indicated one other vehicle on there, the most southerly one. What is that supposed to represent?

A That represents the vehicle as it was traveling in the left lane before going into the skid.

Q Now, actually, where did you get the information that it was traveling in the left lane before it went into the skid?

A From the driver.

Q That would be from -- his name?

A David L. Burlew.

Q And the report -- I guess you may take your seat, if you will -- that you prepared in the course of your official investigation there, was reduced to writing, was it, sir, on a standard form?

A Yes, sir.

Q And included among other things, this diagram and other statistical information?

A Yes.

MR. WALKUP: Pursuant to our discussion, your Honor, I will offer that report, in accordance with your Honor's ruling at this time, as the plaintiff's next exhibit.

MR. SCHWAB: No objection. I think it is marked as Plaintiff's Exhibit 1.

MR. REARDON: No objection.

(Plaintiff's Exhibit 1 fo identification was received in evidence.)

Q Sir, did you determine that there had been any people injured or complaining to be injured in this accident?

A Yes, sir.

Q Will you kindly tell us their names and identify them?

A I have the injured listed as David Lane of 73 Kennedy Boulevard, Pine Beach; Bill Greene, Box 99, Angle Inn Trailer Court in Farmingdale; and a David B. Augher, 445 Central Avenue, in Bricktown.

Q Did your investigation disclose where those particular individuals were with reference to the vehicle at the time of the collision?

A Yes, sir. David Lane, the first, was located in the right front, Bill Greene was located in the middle right, on the right side in the middle seat. And David Burlew is in the extreme right rear. I believe there are three rows

of seats in that vehicle, something to that effect.

Q But, in any event, those were the only ones out of the occupants that claimed any injuries, right?

A Yes, sir, at that time.

Q And did you at that time -- I think you previously indicated you waited for first aid or something -- did you make any notations as to the nature of their injury complaints?

A David Lane was admitted to the hospital for his legs. There was some kind of problem with his legs. They didn't know what it was at the time that I was there. Bill Greene was treated for a bruised right hip and released. And David Burlew was treated for contusion of the left shoulder and released. And they were all treated by a Dr. Samuel Stevens.

Q Was that information which you acquired in the course of your investigation?

A Yes, sir, at the hospital.

Q Were you actually there when Mr. Lane was removed from in or near the wreck?

A I was in the area of it. I wasn't right at the point.

Q Were you actually there at the time that the truck was righted, brought upright?

A I believe I was.

Q Do you remember how that was done?

A I believe another -- I'm not sure. I can't recall.

Q Did you take a statement there at the scene from the driver?

A Yes, sir, I did.

Q And what statement did the driver give you there at the scene?

A That he was traveling north on U. S. 9, he stepped on his brake to slow down because he was approaching an intersection, causing the vehicle to go into a skid, spin around, hit the divider and flip over.

MR. WALKUP: I believe that's all at this time.

THE COURT: You may inquire. Cross examine.

CROSS EXAMINATION

BY MR. REARDON:

Q Officer, I recall your testifying in response to a question by counsel that your best recollection is that the curb at the sight of this accident on the west side was about four to six inches. Do you remember that?

A Yes, sir.

Q Do you recall testifying previously at your deposition in this case?

A No, sir, I don't.

Q Do you remember being examined as a witness in this case?

A Yes, sir.

Q And that took place -- I have a copy in my hands -- on December 20, 1971 at my office; do you remember that?

A Yes, sir.

Q And I think Mr. Barrett of my office was present there that day.

A There were a few other people. I can't recall.

Q Do you recall at that examination being asked the following questions, page 7, line 2:

"Q Do you know the height of the curb?

"A No, sir, not exactly.

"Q Can you approximate the height of the curb?

"A I'd say somewhere between eight and twelve inches."

Do you remember giving those answers?

A I don't remember the answers that I gave.

Q In any event, without trying to establish what the height of the curb is, is it fair to say your best recollection at the moment is it is somewhere between four and twelve inches?

A Yes. I would say the standard height for a curb,

whatever it would be. I really don't know.

Q And you did not measure it at that time?

A No, sir, I had no reason to measure the curb.

Q Now, counsel for the plaintiff has introduced a number of color photographs and some black and white photographs, and I would like to show you a group that I have, some of which duplicate his, and ask you if they fairly represent the accident scene at the time you arrived there and during the subsequent movement of the truck until it left the scene itself. Would you look at these for me?

I am now showing the witness, your Honor, what has been marked as Defendant General Motors A-78 for identification.

Do they fairly represent the site and what you saw that day, sir?

A Yes, sir.

MR. REARDON: I offer them in evidence.

THE COURT: Show them to counsel.

MR. SCHWAB: No objection.

MR. WALKUP: No objection.

(Defendant General Motors Exhibit A-78 for identification was received in evidence.)

MR. REARDON: I believe there are thirteen photographs in that, your Honor.

Q Officer, I would like to show two of these photographs, which I'll mark as General Motors 78-A and B, and ask you if you can tell us from the photographs and your recollection whether you can identify the point at which the right rear of this vehicle struck the curb to the left of the northbound lanes. Do you see any indication or marking on those?

A I would say at the point where there are black tire marks on the curb itself.

Q Would you be so kind as to put a circle around those two, if I give you something to mark it with? Would you put it sufficiently wide around it so that you don't impair the marking itself?

A (Marking)

Q Thank you, officer.

And are you able to tell us from these same two photographs the direction that the right rear of the vehicle took after it struck the curb?

A I would say a northwest direction, or northern direction.

MR. REARDON: With counsel's permission, could I have the witness draw an arrow in that direction on the divider?

MR. WALKUP: Certainly.

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Q It was on the divider, is that correct, officer?

A Yes (marking).

Q Now, where you have drawn these arrows is on the grass divider itself, is it not?

A Yes, sir.

Q And was it your conclusion that after the right rear tire -- with your Honor's permission, may I pass these by the jury as I examine him.

THE COURT: Yes.

Q It was your conclusion, was it not, that as the right rear tire struck the curb at the west side of the northbound lanes, that the right rear of the truck then jumped the divider, the curbing, and proceeded along the grass mall in a northwesterly direction, the same way as you have drawn these arrows?

A I would say the truck went in that general direction. Whether it was upright or not I couldn't say.

MR. REARDON: May I mark those two, 78-A and B, in evidence, your Honor?

(Defendant General Motors 78-A and B were received in evidence.)

Q Now, officer, I show you another photograph which is part of 78 in evidence, and ask you to tell me whether that shows a view of the vehicle taken from the southbound

lanes, the photograph being taken from the southbound lanes looking south.

A Yes, sir, it is.

Q So we are really looking at the top of the vehicle as it had tipped over; is that right?

A Right, sir.

Q And you can see the bottom in that photograph?

A Yes, sir.

Q Now, as depicted in that photograph, the, or at least a, portion of the truck is actually in the southbound lane, is it not?

A Yes, sir.

Q And didn't you have to divert traffic in that southbound lane to the right of the wreck so that it could pass?

A Yes, sir. We closed off both lanes and used the shoulder southbound to let the traffic pass.

Q With counsel's permission, could you write on this photograph "view from the southbound lanes, looking south" or "looking south?"

A On this picture?

Q If you would.

MR. REARDON: Is that all right, counsel?

MR. WALKUP: Certainly.

A (Writing)

Q Thank you, officer.

MR. REARDON: May I pass this to the jury while I continue, your Honor?

THE COURT: Yes.

Q You were a New Jersey trooper at the time of this occurrence, were you?

A Yes, sir.

Q How long had you been a trooper?

A Approximately three years at that time.

Q And during the course of that time, had you had occasion to investigate a number of accidents?

A Yes, sir.

Q What was your territory at the time of this accident?

A I was stationed at the Tennent State Police Barracks. That took in an area of Millstone Township, Manalapan Township and parts of Jamesburg and the surrounding areas.

Q Did that encompass the area of Farmingdale?

A No, sir.

Q Do you know the area of Farmingdale, New Jersey?

A Not very well.

Q In any event, Route 9 commencing at Freehold to

the point of the accident going north would have been your territory?

A Yes, sir.

Q Had you traveled Route 9 earlier that day?

A Yes, sir.

Q And what time did your tour begin?

A 8 o'clock.

Q And commencing at 8 o'clock, had the roads been icy and slippery at that time?

A Yes, sir.

Q Were they through that period -- withdrawn.

And is that true of both sides, north and south-bound?

A Yes, sir.

Q And were they generally slippery and hazardous?

A Yes.

Q By the way, sir, did it come to your attention that morning that there had been other accidents on the highway because of ice and snow?

A There were other accidents, yes.

Q Which had come to your attention?

A I didn't directly handle the accidents, but I was present at two or three, I would say.

Q And would you say that what you observed as to

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those accidents, the cause or at least the contributing cause had been the snow and ice on the highway?

A Yes.

Q You have already read to us what Mr. David Burlew said to you at the scene of the accident; is that right?

A Yes, sir.

Q Did you also, as part of what you did that day, make a general investigation of the accident itself?

A Yes, sir.

Q And did your report, which is now in evidence, record the results of your investigation?

A Yes, sir.

Q And is that set forth in your report which I have here, or at least a copy of it?

A Yes, sir.

MR. REARDON: May I read it to the jury, your Honor?

THE COURT: It is in evidence. You may.

MR. REARDON: "Investigation at scene reveals: That vehicle No. 1 was traveling north on U. S. 9."

Q Vehicle No. 1 is the accident vehicle?

A Yes, sir. That is the only vehicle involved.

MR. REARDON: "And attempted to slow down when approaching the Taylors Mills Road intersection, and in

doing so caused the vehicle to go into a skid, spin around, strike the center divider curb, which flipped the vehicle over and the vehicle then came to rest on its right side facing west. This was determined by the driver's statements and the position of the vehicle at the scene. The condition of the roadway was very slippery at the time."

A Do you remember what the temperature was that morning?

A No, sir, I don't. But it was cold.

Q Cold. Was it below or above freezing, do you know?

A I would guess that it was, because I was at the scene.

Q It was what? Below freezing?

A It was below, I would say.

Q Did you ascertain whether nor not any of the occupants of the vehicle had been wearing seat belts?

A None of them were.

Q Did you ascertain that the vehicle was or was not equipped with seat belts?

A The vehicle -- I was advised that the vehicle was -- did have seat belts, and when I say none of the passengers had them on, the people that were injured did not have them on. I don't know if the other people had them on or not.

Q Right.

Now, as you approaced the site of the accident on Route 9, can you tell us what the level of the road is? In other words, let's take from 500 feet back from the scene of the accident to the scene itself. What is it like?

A It is a downgrade.

Q And am I correct that the point at which the vehicle, at least, mounted the curb was a couple of hundred feet, let's say, from the intersection of Taylors Mill Road or whatever that intersection was?

A I indicate 200 feet, I think.

Q 200 feet. And there was a light there, was there not?

A Yes, there was.

Q The road going backward, toward Freehold Circle from the scene of the accident, can you describe that to us?

A That would have to be an upgrade, I would imagine.

Q And going back further just generally, is it a road with some curves, not sharp necessarily, but some curving and turning?

A Between what?

Q Between the point of the accident and back to the Freehold Circle.

A I would say it was generally straight. There are

some slight curves in it but nothing drastic.

Q No sharp curves.

A No.

Q And at the Freehold Circle itself, that is just what it says, a complete circle, is it not?

A Yes.

Q And do you recall that when you enter from, say, Farmingdale, you would be going completely around that circle in order to get onto U. S. 9?

A You would go halfway around the circle.

Q That is what I mean, halfway, 180 degrees.

A Right.

Q And were you on that circle that morning?

A I believe I did take the loop around there, yes.

Q And was that snowy and slippery as well?

A The entire area, I would say.

MR. REARDON: That's all I have, your Honor.

THE COURT: Mr. Schwab, do you have any questions?

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BY MR. SCHWAB:

Q Officer, first of all, in this drawing of yours, that was essentially your reconstruction of the movement of the vehicle from the time it began to skid until the time it came to rest; is that right?

A Yes, sir.

Q And you have indicated a trailer on your diagram in back of the truck; is that right, Officer?

A Yes, sir.

Q Now, do you know what a pintle hook is?

A No, sir.

Q To your recollection would that trailer ever be connected by essentially one type of bolt, or some sort of hooking device, to the rear of the truck?

A I would imagine it would have had to have been.

Q In event, are you prepared to say, Officer, that while the vehicle was in a skid and rotating, that the trailer always remained in a straight line at all times with the truck? Are you prepared to say that as such? (Indicating)

A No, sir. The only thing I can say is that it did follow the truck around. Whether it went over I really don't know.

Q The point I am trying to get at is, you don't know

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and you are not attempting to suggest that when the truck, let's say, was at this position (indicating) that in fact the trailer was in a straight -- When I say "this position", that is with regard to Exhibit 1-A, the second position shown in the drawing. You are not prepared to say that the trailer was in a straight line with the truck, as distinguished from being at some angle to the truck, are you?

A No, sir.

Q And, similarly, the third position you show of the vehicle, which would indicate a right front wheel near the curb: you are not prepared to say in that regard that in point of fact when the vehicle was in that position the trailer was still at a straight line as distinguished from some sort of jack-knifed position, are you?

A No, sir; I am not.

Q And, Officer, I would just like to hand you all the photographs, if I may, and I am going to show you this photograph, A-78-A, on which a circle has been made, and I ask you with regard to that photograph, Officer, you can see the truck on its right hand side; is that correct?

A Yes, sir.

Q And does that photograph also show the trailer, Officer?

A Yes, sir; it does.

MR. SCHWAB: With the permission of counsel, may the witness draw an arrow to the trailer in the photograph.

MR. WALKUP: Yes.

MR. REARDON: Yes.

Q Will you draw an arrow from perhaps in the sky area pointing down to the trailer, officer, and write "trailer," if you would, above it, so we have that.

A (Writing)

Q Now, officer, would it be a fair statement then, based upon Exhibit A-78-A in evidence, that when you arrived at the scene of the accident, in point of fact the trailer was not attached to the truck; is that correct?

A I don't know that. In this picture it isn't. But I don't know if it had already been removed.

Q Are you in any event prepared to say in point of fact that whenthe truck was actually over on its side, that at that point the trailer was still attached to the truck as distinguished from having broken off and being somewhere else?

A I can't recall, to be perfectly honest with you.

Q Would you look at this photograph A-78-A, if you would, please? Does that photograph serve to refresh your recollection generally of the appearance of the trailer?

A No, sir. I really had no -- other than I knew

that there was a trailer on the vehicle, I couldn't recall what it looked like or anything else.

Q Now, officer, with regard to the height of the curb, as I understood it, you testified at what is known as a deposition on oral examination, or an examination before trial, at the office of Simpson, Thacher and Bartlett in lower Manhattan back on December 20, 1971. Is that a fair statement?

A Yes, sir.

Q Have you had occasion to read your deposition --

A No, sir.

Q -- the transcript of your testimony, before testifying here today?

A No, sir.

Q At the time that you were examined, back on December 20, 1971, were you still covering the area where this accident occurred?

A No, sir, I wasn't.

Q When had you been taken off of that area?

A I believe the end of that month I went to the turnpike.

Q What I'm getting at then, essentially, is that from the time of the accident on February 4, 1970 until at least shortly before this deposition of December '71, a year

and ten months later, you were generally on a job that covered Route 9; is that correct?

A No, sir. I was stationed in Newark on the turnpike, which covered the turnpike, and that's all.

Q When did you get there?

A I can't give you an exact date. I don't recall. But it was soon after this occurrence of this accident.

Q Would it be a fair statement, officer, that your recollection of the events of that day was fresher in your mind back on December 20, 1971, some more than two years ago, than it is today?

A Not really.

Q Well, let me get back to the curb, officer.

You spoke before about this being an average curb. Do you have an independent recollection that the curb on Route 9, that median curb, was what you would call an average curb?

I believe the way it was put to me in the deposition is that they asked me if I knew the height of the curb, and I didn't know the dimensions and I was asked to estimate what I thought it would be, and I think that's what I stated.

Q And in 1971 you estimated somewhere between eight and twelve inches; is that correct?

A Apparently so.

Q And, as a matter of fact, Mr. Reardon read from

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page 7, and now I am going to refer to page 23, gentlemen. Do you recall being asked this question and making this answer, line 13:

"Q What, if anything, did you notice about the curb in the area where the impact occurred?

"A Well, it was a concrete curb, like I said, approximately, I would estimate, eight to twelve inches high."

Did you give that answer to that question?

A Apparently I did. I don't recall it.

MR. SCHWAB: Will counsel so concede that answer to that question?

MR. WALKUP: Yes, sir.

MR. REARDON: Yes.

Q And, officer, you have indicated that there were two northbound lanes and two southbound lanes on the drawing; is that correct?

A Yes, sir.

Q And is it correct that if one were traveling north on this roadway, they would be going, so to speak, in the direction of New York City from southern New Jersey? Is that correct?

A Yes, sir.

Q And to your knowledge, that is the general

direction in which the vehicle involved in this accident was going; is that correct?

A Yes, sir.

Q And, officer, when you described the roadway as being icy and very slippery, that included both the lane going north nearest the curb as well as the lane to the right nearest to the shoulder of the roadway; is that correct?

A Yes.

Q And when Mr. Reardon asked you questions, officer, about the rotary, is that near a racetrack, Freehold Racetrack, the circle there, the Freehold Circle?

A Yes, sir. It is just north of it. The circle is just north of the racetrack.

Q And if I were to submit to you, officer, that as one is proceeding north on Route 9, before reaching the rotary, they come upon an "S" curve first that goes under some sort of an underpass, would that be a fair description of the area going north just before you reach the rotary?

A There is a slight curve. It is not an --

Q I am speaking about an "S" curve.

A A slight "S" curve, covering quite a distance. It is not a sharp -- I won't say there are any sharp curves in it.

Q Well, when you enter that rotary, you have got to

make -- you go straight into the rotary -- you have got to make a right turn then to go around the rotary, do you not?

A Yes, sir. I would call that part of the circle itself. Yes, you do have to make a fairly sharp right-hand curve turn before you enter the circle.

Q And then you are going around the rotary as if going, let's say, from 6 o'clock on a wristwatch up to 12 o'clock on the rotary; is that correct?

A Yes, sir.

Q And then you have got to make a similar sharp right turn off of the rotary to continue straight going north then on Route 9; is that correct?

A Yes.

Q Do you have a personal acquaintance, officer, of, I think it is called, Adelphia Road or State Route 524, I believe it is, from Farmingdale to Route 9?

A Yes, sir, I know where it is.

Q Do you know the road in terms of turns and configurations of that road?

A Adelphia Road?

Q Yes.

A No, sir.

Q In any event, that is essentially a two-lane country road.

A Yes, sir.

Q And when you did get to the scene of the accident, officer, was Mr. Lane in the vehicle or out of the vehiclr or underneath the vehicle or trapped, or what was his position, to the best of your recollection?

A To my recollection, he was trapped in the vehicle.

Q Was he out, any part of him outside?

A I don't recall. I believe there was, but I could not tell you exactly what the situation was. But I know we couldn't get him out of there for some reason, to my recollection.

Q All right.

Do you recall being asked this question and making this answer at the examination before trial, page 26, line 20:

"Q Did you talk to Mr. Lane about the accident?

"A No, I didn't talk to Mr. Lane. He was under the truck. We were, at the time we were interested in getting him out of there as fast as we could. At the hospital I did not get any statement from him."

Do you recall making that answer to that question?

A Yes. I don't recall, but that is the case.

Q Is that a correct statement, in any event?

A Yes, it is, it is.

Q And, officer, I don't recall whether you were

asked that or not, but this roadway at the general area of the accident, was that on a downgrade?

A Yes, sir, it is.

Q Do you have any personal notes of your own with you today as distinguished from your police report?

A No, sir, that's all.

Q Were you there when the truck was righted?

A I don't believe I was. I can't really say. I think I was leaving at the time it was just being righted, to go to the hospital.

MR. SCHWAB: No further questions.

THE COURT: Any redirect?

MR. WALKUP: Yes, your Honor.

REDIRECT EXAMINATION

BY MR. WALKUP:

Q I would like to ask you if, inyour reports, you indicated where the damage to the truck was.

A The right side.

Q The right side. I am going to show you two of these photographs which are now in evidence, of the right front door of the truck and call your attention to that. That would be the right front door of the truck, correct?

A Yes, sir.

Q And does that picture correctly show the

* * *

Q And did you have anything to do, just yes or no, with the ordering of the truck that was subsequently involved in an accident where David Lane was injured?

A Yes, sir.

Q Now, at that time, preliminary to ordering the truck, did you have, in your capacity with the company, any factors in mind that you wanted to be incorporated in this truck to be ordered?

A Yes.

Q Would you tell us what factors you wanted to be included in the truck to be ordered?

A We intended to buy a unit that was equipped with four-wheel drive plus flotation rubber, flotation tires.

THE COURT: What do you mean by "flotation tires?"

THE WITNESS: Flotation is balloon type tires that get you in and off the road very easily. It is actually for off-the-road construction.

Q You have said four-wheel drive. In lay terms, could you explain to us what you mean by a four-wheel drive truck.

A A four-wheel drive is a unit that drives both in the front axle and the rear axle.

Q Now, were there any other particular specifications or things that you wanted accomplished with this truck?

A Yes. We intended to do line construction work mostly off the record.

Q All right. Did you have any particular weight or capacity that you wanted?

A We asked for a truck that had gross vehicle rating of between 30 and 32,000 pounds.

Q And did you have in mind any particular superstructure on this machine?

A Yes.

Q What was that?

A That is a derrick.

Q And what would be the purpose of that?

A A derrick is to handle material.

Q Now, with reference to the flotation tires that his Honor just asked you about, up to that point in time, in your employment with Jersey Central, had you had any such vehicles with flotation tires?

A No, sir.

Q I assume you did have regular pieces of heavy duty equipment there, correct?

A Yes.

Q Up to that time when this particular truck was ordered, what type of tires did your big trucks have?

A They had conventional tires.

* * *

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and back.

Q And what area or radius was the work usually done in with reference to where the equipment was garaged?

A Probably a radius of fifty miles, sixty miles, in that neighborhood.

Q Was this piece of equipment equipped with outriggers or stabilizing devices so that when the boom was working the equipment could be stabilized?

A Yes.

Q Could you describe it to us? I know some of us know what they are, but for the benefit of those who may not.

A An outrigger is an additional support that we use, and there are four on that, one on each corner of the body that hydraulically extend out and give the body in its entirety more stability when you are using the aerial device.

Q Would part of the day this rig or piece of equipment be, say, out in the field putting up or down poles?

A Yes, sir.

Q Where it might remain in the same position for some period of time?

A Yes, sir.

Q Now, your title was what at that time?

A Superintendent of Transportation.

Q And did you have other people under you in the

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THE COURT: We will sit until a quarter to five.

MR. SCHWAB: I have no objection to those exhibits.

xxx (Defendant General Motors Exhibit A9 and A91 for identification received in evidence.)

BY MR. REARDON:

Q I'll try to be very quick, Mr. Dietz. I apologize to you. We stipulated that you got the truck sometime around June of 1967. Does that coincide with your general recollection?

A Yes.

Q And after that you had these problems with the springs which counsel developed, is that right?

A Yes.

Q Then the truck was put in service sometime in July and it ran and did its job from July of 1967 until February 4th, 1970, is that right?

A Yes, sir.

Q Did you, sir, at any time -- can you remember whether you ever received any complaints with regard to the road stability of that truck?

A There had been a lot of complaints, sir, on that particular truck that was never brought to my attention, minor little nick-nack things.

* * *

tion, page 67, line 10:

"Q Do you know that he" - meaning Mr. Burlew - "had never driven this vehicle before the accident?

"A I understand that."

Did you make that answer to that question at your deposition?

A If I said that at the time of the deposition, it is true, yes.

Q Let me show it to you.

A You are talking something I did two or three years ago.

Q I'm not trying to confuse you or anything, sir. Let me show it to you (handing), page 67.

(Pause)

Is that correct, sir?

A Yes.

Q And how did you get that understanding?

A Through conversations on the accident.

Q At the time of the accident?

A Probably.

Q Now, is there any kind of a training program for people who drive heavy trucks like this at Jersey Central?

A At that time, no.

* * *

Q Which one was stuck in the window?

A That was Lee Nichols.

Q All right.

Now, with reference to the vehicle after you got out and after you did whatever you did helping the other men, did you observe the area around the vehicle, that is, the median barrier and so forth?

A Yes.

Q And could you see at that point any marks on the median barrier indicating the course that your vehicle had followed?

A Yes.

Q Tell us what you observed in that regard.

A Well, there was a deep gash in the glass where the glass was plowed up where the tires slid across the median.

Q And which wheel did that appear to you to be connected with?

MR. SCHWAB: Objection.

THE COURT: I will allow him to describe it.

A It was the right rear tire.

Q And the tires on this particular vehicle, were they the same as tires on other trucks you had driven before or not?

A No.

* * *

THE WITNESS: No, they did not.

Q All right.

What type of latch did the door on the man cab have, if you can describe it as a lay person?

MR. REARDON: Objection, your Honor.

THE COURT: Overruled.

A It was a handle that slid back and forth. It unlatched the door this way (indicating).

THE COURT: Indicating a sideways movement or lateral movement.

THE WITNESS: Your, your Honor.

Q Now, did that latch that slid back and forth as you have described, did that door come open when the truck turned over?

A No.

Q There was talk about seat belts. And so we will know what kind of seat belts we are talking about, were these lap type seat belts or over the shoulder seat belts or what type?

A Strap seat belts around the waist.

Q Were the windows of the front cab closed or open at the time of the accident?

A Closed.

Q At the time of the accident, as you approached

* * *

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Q While you were in the outside lane?

A Yes.

Q Were you, yourself, sir, injured in this accident?

A I had just a scratch on my wrist. I was treated for a scratch on my wrist.

Q Did you require hospitalization for that?

A No.

Q Were you off work as a result of it?

A No.

Q Now, after you tapped your brakes in anticipation of that light -- incidentally, what was the light doing up ahead?

A Well, the light was changing to amber. It was --

Q After you tapped your brakes and started to skid, then did you continue to apply your brakes or what?

A No, sir. I immediately took my foot off the brake.

Q Did you apply your brakes at any time more than after you started to skid until the wreck was over?

A No.

Q And your foreman's name was Mr. Conroy, you have told us?

A Yes.

Q Had you before the time of the accident made any complaint to Mr. Conroy about the handling characteristics of the truck?

MR. REARDON: Objection.

THE COURT: I'll allow it.

A No.

Q Your deposition was taken back in 1972 in January, was it not, with all the attorneys present at the office of Simpson, Thacher & Bartlett?

A Yes.

MR. REARDON: I boject to this, your Honor. The witness has answered the question. He hasn't indicated any defect in reaction at all.

THE COURT: Objection sustained.

MR. WALKUP: All right. That's all, then. Thank you.

CROSS-EXAMINATION

BY MR. REARDON:

Q Mr. Burlew, my name is Reardon. I represent General Motors in this case. As I understand it, you joined Jersey Central on January 19, did you say, sir?

A I think that's the exact date.

MR. REARDON: Will counsel agree that between January 19, 1970 and February 4, 1970 are 13 working days?

MR. WALKUP: If you say so, I'll agree.

MR. SCHWAB: I'll stipulate to that, your Honor. I just worked it out myself.

THE COURT: It is an amazing consensus, I would say.

MR. REARDON: One of the few things we probably agree upon.

Q When you started with the company, did you go right to work with that crew?

A Yes, sir.

Q The very first day you started on the job?

A The first day on the job, yes.

Q The first day on the job you went to the Farmingdale yard?

A Yes.

Q Okay. And was the crew just that, namely a crew that worked together every working day?

A Yes.

Q So that all of the gentlemen who were in the truck on the day of the accident together with Mr. Conroy and whoever might have been in the truck with him each day from the time you started would have gone out to work wherever the company assigned the work should be done, is that right?

* * *

on which door.

THE COURT: He is talkiing, I take it, the one alongside of which the plaintiff Lane was seated, is that right?

MR. WALKUP: And which kind of car is he talking about also.

THE COURT: Describe the handle on the door, the one alongside of which Lane was seated.

THE WITNESS: The one alongside where Dave was seated went up to open, I think it was, and down to lock.

Q Is it a piece a chromium metal, shaped in the form of a handle? Is that the way it looks?

A Yes.

Q And that's all that the passenger can see. The mechanism of the locking device, et cetera, you can't see when you are in the cab, right?

A Yes.

Q You can just see the handle.

A Yes.

Q And that handle is something you either turn forward to lock or backward to lock, and you don't recall which at the moment.

A Right. Yes, sir.

* * *

Q And the narrative statement, which is the third page of this report, is that a statement by you of your recollection of the accident?

A Yes.

Q And was this report prepared by you on February 4, 1970, the very date of the accident?

A Yes.

Q Is it fair to say your recollection of the accident as reported in this document was more vivid then than it is today?

A Yes.

Q On the second page, under the item "Movement of Vehicle" in the upper left-hand corner, do you see that, sir?

A Yes.

Q It says, "Rate of Speed, miles per hour," and you have "Approximately 25," is that correct?

A Yes.

Q When you wrote that, did you intend to indicate that the speed you were going at was somewhere around 25 miles per hour?

A Yes.

Q Is it possible, sir, that you could have been going faster than 25?

* * *

got to Jersey Central.

THE COURT: That's what I asked, when it got to Jersey Central.

MR. REARDON: That was June 2nd.

MR. SCHWAB: 2nd, we stipulated.

MR. WALKUP: There will be more evidence coming in tomorrow on that issue.

MR. REARDON: If I can give you the dates quickly. February 17, 1967 FOB Pontiac, Michigan it goes to Hendrickson. Hendrickson then ships it two or three months later -- no, I am wrong. March 9, 1967, Hendrickson ships it to Pitman. Pitman then ships it to Jersey Central and it is received by Jersey Central on June 2, 1967. Payment is made by DeMidowtiz, the dealer, to GM for the cab and chassis. Payment is made by DeMidowitz to Hendrickson for the modification. Payment is made by Jersey Central to Pitman for the work that they do. That, I don't think, is disputed.

MR. WALKUP: Yes. And there will be testimony that Mr. DeMidowitz made payment as an accommodation to General Motors to Hendrickson, that Hendrickson made the quote to General Motors. This will come in tomorrow.

THE COURT: All right. Then I will reserve decision on that until all the evidence comes in.

* * *

for high transmission, or for transmission work, is that correct?

A Yes.

Q And you are uncertain now, sir, whether that trailer, one of the largest trailers, by your own testimony, at Jersey Central, with pictures that indicate that it had four times on it -- you are uncertain now as to whether that trailer had brakes on it or not?

A I don't exactly remember.

Q And you didn't exactly know back on February 4, 1970 either, did you?

A I couldn't possibly tell you. I may have.

THE COURT: February 4th?

MR. SCHWAB: February 4, 1970.

Q In any event, if the trailer did have brakes, the brakes of the trailer were not hooked up to the truck, is that correct?

A I don't remember hooking them up myself, no.

Q Well, whether you hooked them up yourself, you participated in the work to be done, is that correct?

A Yes.

Q And you were the person to drive the truck, is that correct?

A Yes.

* * *

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A It was in my mind, I imagine.

Q It was more than in your mind. You even made a statement to that effect to one of your co-workers, Bill Greene, didn't you?

A Possibly.

Q Well, did you say -- and where was Mr. Greene on the day of the accident with regard to the vehicle? Where was he seated?

A He was in the back.

Q All right. And after the accident, had occurred and you got out of the vehicle and Bill Greene got out of the vehicle, did you say inwords or substance to Bill Greene, "Bill, what am I going to do? I am going to lose my job."? Did you say it to Bill Greene?

A Something to that effect.

Q And that was still on your mind and still a genuine source of concern to you when you worked on your motor vehicle accident report also, isn't that true?

A Possibly, yes.

Q And whenyou filled out in your motor vehicle accident report rate of speed and you said approximately 25 miles per hour, you certainly did not have in your mind at that time a desire to make your speed faster than what it was, did you?

A No.

Q If anything, it was your desire, with your concern about holding onto your job, to minimize the speed of that vehicle at the time of the accident, isn't that a fair statement?

A No. That's why I said approximately.

Q It could havebeen more than 25 miles an hour, could it not have, sir?

A Not to my recollection.

Q Could it have been 26 miles an hour?

A Not to my recollection.

Q It couldn't, then, have been more, to your recollection, than 25 miles an hour, is that right?

A As far as the speedometer on the truck goes, in my recollection, no.

Q When you say the speedometer of the truck, were you looking at the speedometer of the truck just before the accident?

A Occasionally along the trip, yes. I always check the guage.

Q Did you ever attain a speed of more than 25 miles an hour that day?

A Not to my recollection.

Q Not even those times when you were in fifth gear?

* * *

or 12 inches at the bottom, and it just had a pad in the back of it, that's all.

Q Were there any handles for you to hold onto?

A No, sir.

Q Was this an individual seat or one long seat?

A Just one long seat.

Q And when you first started to feel the vehicle going sideways, which way did it seem to be going?

A The rear end of the truck went to the right.

Q And then would you describe what you observed yourself about the action of the truck from the time it started this, the rear end going to the right until it came to rest?

A Well it started going to the right and it seemed to me like it stayed to the right, and it hit the curb and went up on the island and it seemed to come almost to a complete stop, you know -- it was just -- it just fell over. It was completely stopped.

Q When you say it seemed to come almost to a complete stop, at what point in the operation did that occur?

A After it went up on the island and the cab on the truck went into the southbound lane, and it stopped, and it just fell over.

Q When it fell over what happened to your body in

* * *

and a window in the cab of the truck, and you can see into the cab but you couldn't see the whole cab.

Q You say you could not see the whole cab?

A No, sir, I do not think so.

Q In any event, were you particularly, when this rig was sliding and you were holding on, watching to see what happened to the right front door?

A No, sir.

MR. WALKUP: Thank you. That is all.

THE COURT: You are excused.

(Witness excused.)

MR. WALKUP: Kenneth Leighton.

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K E N N E T H G E O R G E L E I G H T O N, called by the plaintiffs, sworn.

DIRECT EXAMINATION

BY MR. WALKUP:

Q Mr. Leighton, where do you reside?

A 15 Western Drive, Lakewood, New Jersey.

Q By whom are you employed?

A Jersey Central Power and Light.

Q How long have you been so employed?

A Since December 13, 1965.

Q And what is your capacity with the company?

A I am a heavy equipment operator.

Q And were you one of the members of the crew on the truck that was involved in the accident when Dave Lane was injured?

A Yes, sir.

Q And on that particular occasion where were you seated?

A I was seated in the front seat in the middle, between the driver and Lane.

Q And as of that time what was your size and weight?

A I was 6 foot 2 inches, and approximately 225 pounds.

Q And as for that time were you engaged in any kind of athletic activity?

A Yes, I was.

Q As what?

A Well, I lift weights right now -- I have for quite a few years -- and played softball at that time, in the warmer weather.

Q On the front seat were there seat belts?

A Yes, sir.

Q And did you have your seat belt on?

A Yes, I did.

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Q On the right of you was who?

A David Lane.

Q And on the left of you was who?

A David Burlew.

Q Did either of those gentlemen have seat belts on?

A No, they didn't.

Q When youwere riding along the highway, at some point in time did something occur which indicated to you that there was some unusual event about to happen?

A Meaning the accident?

Q Tht is what I mean.

A Yes, sir.

Q What is the first thing that you saw or observed or felt which lead you to the possibility of an accident?

A The truck began to slide.

Q When the truck began to slide, which way did it appear to you to start to slide?

A I believe it was to the right.

Q What is your best recollection as to what lane it was in when it was going along just before it started to slide?

A We were in the right-hand lane, the slow lane of the two-lane highway.

Q How long to your recollection, being in the front seat, had you been in the right-hand slow lane?

A Ever since we were on Highway 9.

Q As you proceeded along there and got the first indication that the truck was starting to slide to the right, what then did you observe from that point on until the truck came to rest, in your own words?

A Well, the truck began to slide to the right, and Mr. Burlew, the driver, was attempting to straighten it out, and we slide around to the left.

I myself put my hands to the dashboard to kind of steady myself, and Mr. Lane also had his hands out infront of him witn his hands or fingers on the dashboard.

Q Then will you continue to describe what happened in the --

A Well, the truck come around, and we went across the northbound lane, all the time beginning to slide sideways, and the front of the truck jumped the curb on the median, and the door came open,popped open, and Mr. Lane began to fall to his right. The truck was leaning to his right.

I reached out and grabbed Mr.Lane underneath his neck, grabbed a handfull of his clothes to try to hold him inside the truck, and all the time that I could see out of the corner of my eye, Mr. Burlew was attempting to keep the truck straight, and after we hit the median in the center of

the highway, the truck rolled over.

Q At the time it rolled over, how did it appear to go as far as speed was concerned, your observation?

A Well, as it started to go sideways, it seemed to increase in speed, possibly because we were going sideways, and then after we had jumped the median, the front of the truck had jumped it, we hesitated for a moment leaning quite a bit to the right and hesitated, and all of a sudden just toppled over to the right.

Q You have indicated that you grabbed hold of Dave Lane?

A Yes, sir.

Q Can you tell us or show us what part of him you grabbed?

A Yes, sir, I grabbed him under the chin, and we had our winter clothes on, and I had a handfull of clothes underneath his neck. I reached out to my right.

Q What were you doing with your other hand, if you remember?

A My other hand I went to the left and held on to the back of the seat.

Q From the time you first grabbed on to Dave Lane's winter clothes up here under his neck, until the time that the truck finally came to a rest, did you ever let go or not?

A No, sir, I held right on to him.

Q As far then as the part that you were holding onto of Dave Lane was concerned, did you ever see him, say, go up in the air and hit the roof of the cab?

A No, sir, I didn't.

Q Did you see him--

MR. REARDON: I object to this as leading, your Honor.

THE COURT: Objection sustained. He may describe what he observed.

Q Described what you observed about what Dave Lane's body did.

A This is during the slide or as the truck is turning over, as we slid to the right, again and then come across the highway, we were all holding on the dashboard, like I said, and as the truck hit the median, the door came open. The truck was leaning to the right, and we were all leaning also with the truck, and Mr. Lane started to slide outwards out of the door, and that's when I grabbed him.

He was sliding down and out like toward the door, heading out the door.

Q Then to your observations did any of him get out of the door?

A Yes, sir. His legs were going out the door. His

feet were out the door, and I believe like his right arm and hand was out the door, possibly his shoulder.

Q I take it from that that the rest of him was not out the door?

A No, sir, I had hold of him.

Q Then you have indicated it was on its side and came to rest, right?

A Yes, sir.

Q At that point, can you tell us what position the right front door of the front cab was in?

A It was half open and half closed. It was bent up pretty good.

Q How did you get out then?

A I kicked the windshield out of the front of the truck. It was a two-part windshield, and I went out through the windshield.

Q Did you release your safety belt at some point?

A Yes, sir, after we had turned over and come to a rest, I undone my safety belt and then kicked out the windshield.

Q When you undid your safety belt, what if anything happened to your body at that point?

A I came down a few inches down toward Mr.Lane.

Q How about the driver, Mr. Burlew? Did you observe

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observations as to any particular riding characteristics of that particular truck? Yes or no.

A Yes.

Q What observations did you yourself make?

A I thought it was unstable and top-heavy, tough to drive.

Q What was there about it that led you to that opinion?

A From daily use on the right of ways and on the road, that the truck seemed to be somewhat unstable.

Q Could you give us any examples of how you observed this?

A Yes, sir. On the highways or back roads, any kind of curve in the road, the truck would lean to whatever, left or right, depending on which way the curve was; and off the road use, in which we used the truck also on right of ways, the truck would go back and forth, sway quite a bit.

Q In connection with the happening of the accident, did you hear any particular noises at any point in the occurrence of the accident that you recall?

A In the accident itself?

Q Yes, sir.

A Yes, sir, I did.

Q What?

A The door, when the door came open,

Q What did you hear when the door came open?

A It was like a loud popping metal against metal sound.

MR. WALKUP: That is all I have. Thank you.

CROSS-EXAMINATION

BY MR. REARDON:

Q You were a heavy equipment operator at the time of the accident, were you, sir?

A Yes, sir.

Q Having just been promoted from driver?

A Yes, sir, that's right.

Q You had driven this car or truck since it was brand new, I think you said.

A That'scorrect.

Q So that means you would have driven the truck, if you will assume this statement to be correct, from sometime in, let's say, June or July of 1967 till sometime in January of 1970; is that a fair statement?

A That's fair enough.

Q So that is roughly two years and six, seven, or eight months?

A Yes.

Q Incidentally, is there a difference between a

* * *

Q For these various things?

A That's correct.

Q Am I correct that at the time you took this truck in the initial delivery from Pittman Manufacturing with the boom on it, that you never complained to Mr. Dietz about any instability about that truck, did you?

A That's correct.

Q Am I also correct that you know of no accidents that that truck had ever been in prior to this particular occurrence on February 4, 1970?

A That's correct.

Q Am I correct also that in terms of the actual use of the truck, while you were the driver and had therefore the opportunity to personally observe it, that 60 percent of the time you would estimate it would be used on the road and paved highways and forty percent off the road on rights of way and dirt roads and things of that kind?

A I would say that's pretty close.

Q Was it not, sir, your observation in terms of the overall truck as far as it operating along the road, that from the ground level up to the cab, let's say, was a normal distance from the road, 3 and a half to four feet?

A To the first step?

Q Yes, to the first step.

* * *

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until the accident itself, is it a fair observation that with the exception of minor repairs and layovers when the truck wasn't being used, that it was continually in use by Jersey Central?

A Yes, sir.

Q Is it so that the crew, in the ordinary course, this being a transmission crew, would have need of this truck on a daily basis and would use it every day?

A That's correct.

Q And you had occasion, didn't you, in the two years and some months to drive the truck off the road in various kinds of road conditions?

A Yes, sir, I did.

Q Over curbs and things of that sort?

A Yes.

Q The door never popped open on any of those occasions, did it?

A None that I remember, no.

Q Let's talk about Mr. Burlew for a minute, the driver on that day. You know that he was an employee of Jersey Central for just a few weeks at the time of this accident, don't you?

A I believe that's right, yes, sir.

Q Isn't it so, sir, that you don't recall if Mr.

* * *

A No, sir.

Q You certainly weren't able to look to the rear in any sense; isn't that so?

A Thats true.

Q So you don't know, do you, as a matter of fact, whether or not any sound or anything else you heard may not have been something like the trailer jackknifing into the truck during the course of that slide around to the island; isn't that so?

A It's possible, yes.

THE COURT: Do you have many more questions of this witness?

MR. REARDON: Yes, I do.

THE COURT: If you do, then we will take our mid-afternoon recess at this point.

MR. REARDON: Your Honor, could I ask the witness to be placed under the rule during cross-examination?

THE COURT: Yes. Don't discuss the matter with anybody during the recess.

(Recess.)

(In open court, jury present.)

CROSS-EXAMINATION CONTINUED

BY MR. REARDON:

Q I would like to talk about the accident itself,

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in the counterclockwise direction?

A Yes, sir.

Q And at some point in that turn did both front wheels mount the divider?

A Yes.

Q And after the front wheels got on that cross divider the rear came around the right rear tire?

A Yes.

Q And then the left rear tire mounted the divider, didn't it?

A I believe it did, yes, sir.

Q Did you observe later that there had actually been a dragging from the right rear tire across that grass mall which was snow-covered?

A I don't know if it was from the tire mark, but it was marked.

Q There was a mark from the point on the curb to the point where the truck seemed to have tipped over, is that so?

A Yes, sir.

Q Is it fair to say, sir, that after the truck went up on the divider the truck was sort of listing -- tipping to the right; is that right?

A Yes, that is right.

Q And this rearward counterclockwise motion still continued during that period?

A Yes, sir.

Q Is it fair to say that when that right rear wheel struck, your best recollection is that it was then that the vehicle started tipping?

A No, we were leaning quite a bit during the slide, and when the front wheels jumped the curb that leaned more when the back tire did hit -- it still leaned quite a bit.

Q I am not talking of leaning so much as tipping -- tipping.

A Yes, sir.

Q The tipping itself started, as best you can recall, when that right rear wheel struck that northbound or westerly curb of the divider; is that a fair statement of your recollection?

A The easterly side of the divider itself, but, yes, that is correct.

Q And you do recall testifying, do you not, that when the wheels hit the divider the truck itself was upright?

A The front wheels, yes, sir.

Q And the actual tipping over of the vehicle took

place after the front wheels had gone down the westerly curb of the divider; am I correct?

A That is correct.

Q Now later -- I know you were at the scene for a time, but later at the garage when they took the truck back, you had occasion to look at the right rear tire and rim?

A Yes, sir, I did.

Q And you observed that the right rear tire was flat, isn't that so?

A Yes.

Q Did you see the tire actually physically come off the bead, or the bead had broken away from the wheel?

A Yes, sir, I did.

Q And the bead is that portion around the edge of the wheel that holds the tire secure to the rim or wheel and gives the air lock, is that so?

A That is correct.

Q And was it your observation that in the course of this accident, when that right rear wheel came around and struck the easterly curb that the bead had broken?

A Yes, sir.

Q And isn't it so that you observed actually embedded within the wheel itself concrete scraping?

A On the outside of the rim.

Q On the outside?

A Yes, sir.

Q And that would be the very same surface which would have struck the curb, is that right?

A That is right.

Q There has been varied testimony about the height of that curb that the wheel struck.

Do you have any independent knowledge or recollectio of what it it or was?

A I would estimate approximately somewhere around six inches.

Q Have you ever had occasion to measure it?

A No, sir.

Q I see.

From the time the brakes were first applied, how much time elapsed until the truck was physically tipped over?

A I would say probably within 10 or 15 seconds. I am not sure -- it seemed like a long time.

Q Like a long time.

A Yes.

Q Were you concerned for your safety in that period?

A No, not right then. I don't think I realized or thought about it.

Q In any event, you were sufficiently aware of the problem so tnat you tried to brace yourself as best you could.

A Yes, that is right.

Q Andyou had your belt on at that time?

A Yes, sir.

Q During the course of this trip did you keep an observation at all times what the driver was doing?

A At all times?

Q Yes.

A No.

Q So is it possible that at some point during the counterclockwise drift, after the braking, that the driver had either applied the brakes or turned the steering wheel, or made some maneuver with the vehicle that you were not in a position to observe?

A It's possible, yes, sir.

Q Isn't it so that as that slide progressed the vehicle seemed to pick up speed?

A Yes, sir, it seemed to, sideways.

Q When the vehicle struck, the right rear, was there a jar -- do you know what I mean by a jar?

A I don't remember a severe jar -- quite a jar -- a bump, a good shot, but I wouldn't say it was a real, severe jar.

Q Was it more severe or less severe than the jar when the front tires went over it?

A I would say it was more severe when the back tire hit.

Q In other words, when the back tire hit, you felt the greater impact in the inside of the cab?

A Yes, I did.

Q Than you did when the front tires went up on the curb?

A Yes, sir, I would say so.

Q And you had taken that truck up on curbs before, had you not?

A Yes, sir.

Q Now when the vehicle jumped the curb in the front, I think you said, you put your hands out on the dash or --

A I put them on the dash.

Q You are six feet two inches tall.

A That is correct.

Q You were taller than Mr. Lane, were you not?

A Yes.

Q Were you able to reach fully out and touch the dash in this period?

A Yes, sir.

Q I think you said you observed Mr. Lane reach out and do the same thing?

A That is correct.

Q To your right you had nothing to reach for except Mr. Lane, I take it, within your reach?

A That's true.

Q You were strapped in at the waist?

A Yes, sir.

Q And on your left the only thing you could have grabbed was the shift lever of the truck, is that right?

A That was on my left.

Q Or the steering wheel itself?

A That is true.

Q Or Mr. Burlew, to your left?

A And the back of the seat.

Q Beg pardon?

A And the back of the seat.

Q And the back of the seat?

A Yes, sir.

Q That was really further around?

A Yes, sir.

Q Now what was to the right of Mr. Lane?

A The door.

Q And where with relation to the door and his torso as he was sitting in that seat was the door handle?

A I believe it was in front -- probably a little bit above his leg, his knee.

Q In other words, in the seated position in that truck -- just as I am seated here (indicating) -- without saying this is the same height from the floor -- that handle would be somewhat above his knee?

A And back possibly towards his thigh a little.

Q Back towards my thigh (indicating)?

A Yes, I believe that is where it was.

Q In other words, he would not have extended all the way to touch that door handle?

A No, I don't believe he would.

Q And it would have been short of that that his elbow could have been --

A Yes.

Q And he could have used it for that purpose had he wanted to?

A Yes.

Q Youm, of course, did not keep his hands under your observation throughout that entire trip until the

truck came to rest?

A No, I did not.

Q And you do not recall whether he kept his hands on the dashboard at all times during that whole trip, do you?

A Not the whole time, I don't recall it, no.

Q Now am I correct, sir, that the door -- the right front door of that cab opened at a time when the truck had already started to tip?

A To lean.

Q Well, did you ever say "tip?

A It's possible; I might have.

Q Well, would you agree with me that however you called it, tipping or leaning, that it was in at least a 20 degree tip or lean?

A Yes, I think that is fair.

Q You recall testifying to that extent, do you not?

A Yes.

Q By 20 degrees you understood or I understood you to mean 20 degrees off 90 degrees, in that direction, is that right?

A That is approximately right.

Q So that would be sort of like this (demonstrating).

Would you stand up and show us what kind of tip you are talking about.

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(Witness stands.)

A Well, it felt to me like this -- if this was where the truck was straight (indicating), we were leaning to the right approximately like this (indicating).

Q Okay.

(Witness sits down.)

Q And you in the course of that tip would have been leaning towards Mr. Lane?

A That is true.

Q And it is so, your upper torso, that portion which was not restrained by the lap belt, did lean in that direction.

A Yes, sir.

Q And is it also true that your lower body, not restrained, particularly your legs, would also have been going in that direction during the same period?

A Yes, sir.

Q Now, the lock on this door -- the locking mechanism, so far as you knew it was in working condition on the day of the accident, isn't that so?

A Yes, sir.

Q And you had never had any problem in your two years or six or seven or eight months with that door in any respect?

A None that I recall, no.

Q Do you happen to know whether or not that door was even fully locked at the time of this occurrence?

A Fully locked or closed?

Q Well, let us take "locked"?

A No, I wouldn't know whether it was locked.

Q How about "closed"?

A Yes, sir, it was closed.

Q How do you know that?

A Because you would have heard it rattle if it hadn't been closed, or partially closed.

Q Had you ever heard it rattle before?

A Yes, sir.

Q When?

A When it was partially closed, and working on right-of-way job sites, someone might push it to close it so that we could push it up a few feet to do another job -- if it wasn't closed tight you would hear it move.

Q Well, sometimes it happens with your car -- if you want to back out you don't slam it tight?

A Yes.

Q You just close it loosely?

A Exactly.

Q Now I think you have noted that you had been

* * *

riding in the vehicle?

A. The left-hand side of the man cab or the rear compartment.

Q. You would be then on the driver's side behind the driver?

A. Yes, sir.

Q. But in the back cab?

A. Yes, sir.

Q. May we have your approximate weight at that time?

A. At that time it would have been around 140, 150.

Q. And your approximate height at that time?

MR. REARDON: I object to the relevance of this, your Honor.

THE COURT: I will allow it.

A. Five foot seven.

Q. Where you were seated there, as you were riding along the highway, Highway 9, before the accident were you strapped into your seat in any way?

A. No, sir, I was not.

Q. Were you hanging onto any handles of any kind as you rode along before you knew there was going to be an accident?

MR. REARDON: May I have a continuing objection to this line, your Honor?

* * *

Nichols and Mr. Greene.

Q When the wreck was all over and the truck had come to rest, what was the situation as far as the door of the back cab was concerned?

A. As far as it being closed, you mean?

Q Yes.

Q The door was closed, and of course the truck was on that side. It was against the ground.

Q How many days, weeks, or months, if any, had you previously ridden in that same truck before the day of the accident, approximately?

A. Approximately four months.

Q In the four months approximately before the accident that you had ridden in that truck, had you yourself ridden in the front or the back cab or both cabs or what?

A. Alternately from front to back or driving or whatever.

Q Had you driven it sometimes yourself?

A. Yes, sir.

Q How much driving experience had you had in driving that particular piece of equipment before the day of the accident?

A. Well, it's hard to recollect, but I would say minimal. When Mr. Leighton wasn't present, or when there

* * *

New Jersey, we were -- well, no, we weren't off the road completely -- we were on a narrow road. It was a dirt road. I don't remember if there was an industrial complex around there, and it was a right of way and a road.

The foreman had told me to keep the vehicle, the truck, as far to the right as possible while we were working along this pole line; and I pulled the truck approximately halfway off the road,I would say, and one particular time the front wheel fell into a hole of some sort, and when it was going forward, of course, but when that front wheel fell in that hole, I had a very distinct feeling like, "Hold on, this thing could go over."

But the momentum brought the truck back out of the hole again, and it bounced back and forth and stopped.

Q Were you yourself injured when the truck went over?

A Not through actually tipping over, I don't believe. I did have a couple of injuries, but I believe they were trying to get out of the truck after the accident.

Q What injuries were they?

MR. REARDON: Objection, your Honor.

THE COURT: Objection sustained.

MR. WALKUP: All right, I have no further questions.

CROSS EXAMINATION

BY MR. REARDON:

* * *

Q Dave Burlew was a utility worker; is that not correct?

A Yes.

Q Sometimes you do let a utility worker drive the truck, don't you?

A When there is no truck driver, the utility driver always drives it.

Q You had other first class line men in that crew that day, did you not?

A Yes.

Q You just selected Dave Burlew, a utility worker, to take that truck out on that day?

A That is a union rule where the low man has to be upgraded to truck driver.

Q This is a union rule?

A Yes.

Q When was that rule put into effect?

A Oh, as long as I can remember.

Q Are you telling us that, because of a union rule, you put this man into that truck that morning to drive those 30 miles on those snowy, icy, hazardous conditions?

A Yes.

Q Rather than to put either a driver or an experienced first class line man behind the wheel of that truck with six

* * *

THE COURT: You may proceed, counsel.

MR. WALKUP: Robert Ehrlich.

I. R O B E R T E H R L I C H, called as a witness in behalf of the plaintiffs, being first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. WALKUP:

Q Mr. Ehrlich, where do you reside, sir?

A In Teaneck, New Jersey.

Q What is your occupation or employment?

A I am an engineer for Stevens Institute of Technology.

Q What is Stevens Institute of Technology?

A It's a school. I am in charge of the Transportation Research Group of the Davidson Laboratory, which is the research arm of Stevens. I also hold a professorship in the Mechanical Engineering Department.

Q So that we will understand your experience and background and qualifications, I am going to start with your college degree. Where did you have your regular college degree, and what was it, and what year?

A I graduated from the United States Military Academy at West Point in 1950, and the degree was in

military engineering.

I got a commission in then called cavalry, today called armor, and served three years with armor in Europe.

Q Proceed.

A I then transferred to the Ordnance Corps and spent seven more years in the Army in Ordnance, mainly involved with automotive research and development, four years at the U.S. Army Tank Automotive Command in Detroit.

Q Did you obtain further degrees in your career over and above your West Point degree?

A The Army sent me to advanced school at Purdue University. I got a Master's degree in engineering sciences.

Then I went on my own to the University of Michigan and got a doctorate in mechanical engineering.

Q That is a Ph.D.?

A Ph.D., yes, sir.

Q What year did you get your Master's degree in engineering sciencs at Purdue?

A I got my Master's from Pursue in 1956 and my doctorate from Michigan in 1960.

I am a registered professional engineer in the State of New Jersey and Michigan.

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Q With reference to your work career over and above your studies, you first started dealing with vehicles in your career at what period of your working life?

A Well, really I was interested in vehicles all through college and worked closely with the Ordnance Laboratory at West Point, but in my first assignment in the Army was with armor, which is mainly vehicles, and I have been involved with vehicles in one way or another ever since.

Q One of your stops on your work career was a project engineer at the U.S. Army Ordnance Tank Automotive Command in '56 and '57. What work did you do there with vehicles?

A Mainly involved with suspensions, automotive suspensions, wheels, tracks, springs, from the ground to the chassis essentially was my responsibility.

Q In your career, I understand that you were assistant chief of the Land Locomotion Research Laboratory at the Detroit Arsenal from 1957 to 1960. During that period of your career, what did you do with reference to vehicles?

A Well, that was a special group at the arsenal that looked at the entire vehicle and made sure that everything functioned as a unit together rather than looking at specific components, like the engine or transmission, where most automotive engineers operate on more specific

items. This group took the vehicle as a whole and made sure that everything functioned properly.

Q Your curriculum indicates that you were supervisor for International Electric Corporation, 1960 to 1962. During that period of your working career, what did you do?

A Well, after I left the Army I spent two years with ITT in computer programming. It had really nothing to do with automotive work at that time.

Q Have you been consultant to various corporations during your career in connection with vehicular matters?

A Yes, I got back into vehicle work in 1962 and I left ITT and I headed the group which is called Transportation Research Group at Stevens, which covers all the automotive and amphibious vehicle work, and I have been consultant with many different companies, Chrysler. I am still a consultant with the Tank Automotive Command. I am a member of their scientific advisory panel.

I have been on Army and industrial boards investigating various problems in motor vehicle design.

Q Have you done any consulting work for General Motors Corporation?

A Yes, sir, I have, for their -- not for them directly but for some of their agents.

Q In connection with vehicles though?

A Yes.

Q And the functioning of vehicles?

A Yes.

Q In your work, have you contributed to the literature of engineering sciences with relation to vehicles in various journals, publications in the engineering and vehicle field over the years?

A I have about 30 or 40 published papers -- I really don't keep count any more -- in the automotive field.

I am currently the general secretary, which is like the head, of the International Society for Terrain-Vehicle Systems, which is the international organization involved in off-road performance of automotive vehicles.

I am a member of the Society of Automotive Engineers and chairman of their Special Purpose Vehicle Committee, which are vehicles designed for particular purposes rather than the general truck and automotive line.

I am also a member of the Society of Mechanical Engineers.

Q I have an advantage because I have your curriculum here. Did you have something to do with vehicles that went on the moon?

A Yes, I was adviser to NASA and also worked very closely with Grumman Corporation on the design of the lunar

roving vehicle. That's what they called the vehicle which went on the moon.

Q Have you been a consultant to the Midwest Applied Science Corporation in your career?

A That was a company in Lafayette, Indiana. I worked with them on ride problems of vehicles.

Q What do you mean by ride problems?

A The problem of comfort, ride comfort, the vibrations that a person gets when he drives a car or truck.

Q Lastly, in your work as manager of transportation research group at Stevens Institute of Technology, that has been from 1962 to the present, correct?

A That's correct, yes, sir.

Q Tell us in a little more detail what your work there in that capacity involves.

A Well, the Davidson Laboratory is divided roughly into two areas. One is ship research and the other is automotive research. I have the automotive group, which includes the amphibians, which are kind of a cross between the two.

We do work in highway safety, vehicle design, off-road mobility, quite a lot of work for the Army in design of motor vehicles, analysis of vehicle performance.

We do model tests of vehicles. We build full-scale

vehicles. We do a lot of work on highway safety for the Department of Transportation.

At present we are heavily involved in tire research. We have done work on pavement research, skidding, dynamics of the vehicles and the impact barriers.

We worked with the State of New Jersey in designing the concrete center barrier which is now becoming widely accepted.

I also teach automotive engineering course in the graduate school at Stevens Institute, and I teach a course in what is called similitude, the use of models in studying of vehicle dynamics and vehicle performance.

Q This course, this similitude, does that involve work by you and under your direction in actually making models of parts of vehicles and the functioning parts of vehicles?

A Yes, that's a very important part of engineering is the ability to build a model. A model is much cheaper and much easier to analyze than a full-scale vehicle many times, and so we do a lot of work in model studies.

It's much less dangerous very often to work with a model. You can control it much easier if it gets out of hand, because the forces on a model are so much less, the damage is much less if it gets out of control.

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Q Aren't these models that you use in the course which you teach on similitudes, is it?

A Yes, that's a course I teach in the graduate school. It's a graduate level course for master's and doctoral students, and I teach -- it teaches how to scale properly.

There is quite an art in scaling. It's not just measuring and making everything smaller. It's quite a bit more involved than that.

Q My question with regard to that is, are these models used in teaching purposes and to illustrate things by use of models to make them clear to people to understand?

A Yes, they can be used as instructoral aids. They can be used as a research tool. They can be used in many, many different areas.

Q At the request of Mr. Hirschhorn, did you undertake on his behalf, on behalf of his client, Mr. Lane, to go to the scene of where a record vehicle was and, first of all, make an overall examination of that vehicle?

A I went to the vehicle. I didn't go to the scene of the accident. I inspected the vehicle and made an inspection of the vehicle,yes, sir.

Q I will show you a number of photographs which are in evidence here, 1 through 9, I believe, and if you will quickly look at those, you have seen smaller pictures

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similar to those, have you, sir, before coming here today?

A Yes, sir.

Q Those are photographs at the scene of the accident, correct?

A So I have been told.

Q Have you also seen, before coming here today, the portion of the police report which is enlarged here on the blackboard as Plaintiffs' 1A?

A Yes, sir, I have seen that drawing before.

Q Has it been explained to you that vehicle 1 in that diagram should be in the right-hand lane rather than on the inside lane?

A Yes, sir, it has.

Q When you first went to look at the vehicle, will you tell us and refresh yourself from your report if you like, the date and place that you first saw it?

A My report indicates I went to York, Pennsylvania, at the Pitman Manufacturing Company yard on September 25, 1970, and I inspected the Jersey Power and Light pole-setting truck Id. No. TM7750AD3312G.

Q On that occasion were you permitted to move the vehicle, or did it remain stationary?

A No, I was told I could look at it, take as many pictures as I wanted, but I was not to move it or disturb

it in any way.

MR. REARDON: Can we establish who he talked to, your Honor?

THE COURT: Yes.

Q Yes, who had it in his custody that gave you those instructions?

MR. SCHWAB: No, I object. There are two questions in one. I object to the form of the question.

MR. WALKUP: I withdraw the question.

Q Who instructed you to do this in that manner?

A There was a Mr. Coons from Pitman who I spoke to, and he is the only one I spoke to, so I presume that was the person.

I spoke to a Mr. Cudney from Jersey Power and Light, but I am pretty sure it was Mr. Coons who gave me that instruction.

MR. REARDON: Anybody from GM? I respectfully move that this testimony not be deemed admissible against General Motors, your Honor. We weren't present.

MR. WALKUP: As to the instructions.

THE COURT: That will be received only as against Pitman.

MR. WALKUP: However, as to questions about his findings on examination, I take it that is not --

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THE COURT: That is going in as against both defendants.

MR. WALKUP: Yes, sir, thank you.

Q You took photographs?

A Yes, sir.

Q I have a number here which have already been marked as Plaintiffs' Exhibit 80Q1 for identification, Plaintiffs' 80M1 for identification, 80N1 for identification, 80L1 for identification, 80K1 for identification, 80J1 for identification, 80I1 for identification, 80H1 for identification, 80G1 for identification, 80F1 for identification, 80E1 for identification, 80D1 and 80C1 for identification, 80B1 for identification, and 80A1 for identification. Correct?

A I have seen them.

THE COURT: You haven't shown them to the witness.

Q I thought I showed them to you before. Sorry.

A Yes, sir, these are blowups of the pictures I took, I believe.

Q Do those pictures which you took fairly represent the condition of the vehicle as of the time you took each respective photograph as shown in the photographs?

A These are the pictures I took at the yard. These three pictures I took in my laboratory. That's M1, N1, and O1.

MR. WALKUP: First then with reference to the photographs that you took at the yard when you saw this vehicle, I will offer those in evidence rather than for identification at this time.

THE COURT: Are counsel familiar with them? Show them to counsel now.

MR. REARDON: These were marked at lunchtime, weren't they?

MR. WALKUP: These were in Professor Severy's deposition which you took in Los Angeles.

MR. REARDON: Little 3 by 5 photographs.

MR. WALKUP: Right, but these are the same ones.

MR. REARDON: May I inquire, your Honor?

THE COURT: Yes.

VOIR DIRE EXAMINATION

BY MR. REARDON:

Q Mr. Ehrlich, these were taken, I think you said, on September 25, 1970?

A Yes, sir.

Q You are aware, are you not, that the accident took place on February 4, 1970?

A I am not sure of the exact date of the accident.

Q Will you accept my representation that that is what counsel have agreed upon?

A Yes, sure.

Q Did you at any time before coming here today compare these pictures, which are the subject of this offer, with any other photographs of the vehicle taken after the accident?

A Well, I saw some of these pictures, and I compared, like this picture with that picture.

THE COURT: When you say these pictures, to what are you referring?

MR. REARDON: He is referring, your Honor, to the group of photographs which have already been received in evidence as General Motors 78, which are the color photographs.

THE COURT: Taken when?

MR. REARDON: The 8 by 10s, I believe, all taken at the scene of the accident.

THE COURT: On the day of the accident?

MR. REARDON: On the day of the accident. Let me just verify that. I can't personally attest to it because I didn't take them. Somebody in Jersey Central did, but I'd be prepared to agree to that.

MR. WALKUP: That is our understanding.

MR. REARDON: All right.

BY MR. REARDON:

Q Do you know, sir, other than this comparison that you made, whether any changes were made in the truck in any respect between February 4th and September 25th?

A Only by visual comparison of the photographs. I know of no history between the two, no, sir.

Q Do you know where the vehicle was stored?

A No, sir.

Q Do you know whether it was kept indoors or out of doors?

A No, sir.

Q You don't know whether anybody did anything to the whole truck or any parts of it during that interval, other than what you could observe by a comparison of the color photographs you have identified and these?

A That is correct, I do not know.

MR. REARDON: I have no objection to them being received as evidencing the condition of the truck as of the time he saw it, your Honor, without conceding that they are the same as they were at the time of the accident.

THE COURT: Mr. Schwab?

MR. SCHWAB: That sounds like a good idea, your Honor. I will agree with Mr. Reardon's position.

THE COURT: I don't understand the first point, it sounds like a good idea. If there is going to be any

question about it, at the request of the plaintiff I am prepared to issue the process of the court to bring somebody here from Pitman to show the condition of that automobile as compared to what it was on the day of the occurrence of the accident.

MR. SCHWAB: Well, your Honor, most respectfully, I don't think Pitman will give much of an answer in that regard.

THE COURT: I don't know. I have no knowledge of it.

MR. SCHWAB: We didn't have it for nine months or anything like that.

THE COURT: You better trace the vehicle then, unless you are satisfied to take the stipulation in that manner. You may run into questions later on.

MR. WALKUP: I will take the stipulation.

THE COURT: I don't want to hold up this trial unnecessarily.

MR. WALKUP: I understand. I will accept that stipulation, because I think the parts of the vehicle he is interested in we can establish as to those parts.

THE COURT: If you can, that is all right.

DIRECT EXAMINATION CONTINUED

BY MR. WALKUP:

Q You are going to be testifying here, sir, just

primarily with reference to the right door of the truck and the latch system of the right door and that controlled that right door, are you not?

A Yes, I believe so.

MR. REARDON: On direct, you mean?

THE COURT: I didn't hear you, Mr. Reardon.

MR. REARDON: I said on direct.

MR. WALKUP: That is what I propose to examine him up.

Q Insofar as that door is concerned, does the picture of the right door which is shown in the on-the-scene photographs appear to you to be identical in the configuration of the door with the door that is shown here in court and also shown in the large photographs which have just been given to you?

A Well, the only --

MR. REARDON: If your Honor please, could I object to that and have a voir dire on that? May I just look at the color pictures for one minute?

MR. WALKUP: Well, except for the snow. We didn't have snow on these.

MR. REARDON: I agree with you. Even in York, Pennsylvania, they don't have snow in September.

Could I ask a specific question, your Honor?

THE COURT: Yes.

MR. REARDON: None of these photographs, sir, the color photographs, GM 78, show what I will call the striker or the door latch on the truck at the scene of the accident, do they?

THE WITNESS: This appears to be the door latch here. The striker appears to be covered by snow.

MR. REARDON: In other words, you can't see the striker? Can you see something in the picture, one of the pictures which you say appear to be the latch?

THE WITNESS: I think that's the latch.

MR. REARDON: Are you sure?

THE WITNESS:No, I am not sure.

MR. REARDON: I object, your Honor. I will offer the stipulation in the form proposed, but I don't think there is any basis for comparison here of the latch and striker, which I believe is the subject of it.

MR. WALKUP: I will accept the stipulation as currently proposed and work from that foundation, your Honor.

THE COURT: All right.

BY MR. WALKUP:

Q At the scene of the accident, or rather the scene of the inspection, these were the photographs that you took, and I don't know if they are large enough for the

jury to see from there in detail, but we could, to save time, just hold them up and then pass them to the jury later if that would be agreeable, your Honor.

Starting with that picture --

THE COURT: Have they been received in evidence? Have you offered them?

MR. WALKUP: I thought we had agreed.

MR. SCHWAB: I have no objection.

THE COURT: Have they been marked?

THE CLERK: They have been marked Plaintiffs' Exhibits 80A1 and including 80L1.

Q Starting with this one, sir, that is obviously the picture of the front end of the truck, right?

A Yes, sir. I took a series of pictures. The truck was parked in a narrow passageway, and I couldn't get back far enough to take the entire truck with one shot with the lens I had, so I took a series of pictures from front to rear. This is the front, this is a little back of the front, this is where the front part of the crew cab is.

This is the rear section of the crew cab, and these two are part of the superstructure added which includes a number of tool bins, and this is the aft end of the vehicle, which includes the mounting for the crane.

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Q So by spreading those out, you can get an overall picture of the front to rear?

A Yes, these could be pasted together if you wanted to.

Q Then you have another?

A This is a general three-quarter rear shot showing the truck in its entirety from one side.

Q And the next one?

A This was the damage to the front, the windshield is out and the -- some dents in the front grill.

Q This closeup view shows what?

A This is a closeup view of the door that was bent, and shows the latch in place and some damage in and around the door.

Q Do you have others taken of that door and latch on the day of your inspection?

A Yes.

Q I think I handed you one.

A This is one of the door and the cab. This is mainly taken for proximity of the door and damage to the fender and identification of the vehicle.

Q That one is numbered what?

A This is 80-H-1.

Q I show you 80-I-1.

A That's a closeup view of the latch on the door taken at the Pitman yard.

Q Then I show you 80-J-1. What does that show?

A This is a closeup view of the striker plate which is mounted on the frame and which the door latch engages.

Q Could you point to the striker plate?

A This is called the striker plate. It's mounted by four bolts here and four bolts here. It contains a little tip which engages in the latch.

Q I hand you now 80-K-1. What does that show?

A This is a shot of the opposite door undamaged, the door and the latch, so that is what an undamaged door looks like.

Q Lastly, 80-L-1.

A This is just I was inspecting the entire vehicle, not just the door, and this was a picture of the controls for the boom which are mounted on the rear of the truck. Also, it contains a picture of the license plate for identification.

Q Did you at some point in time physically remove the door from that truck and take it to your laboratory?

A No, sir, I did not disassemble or disturb the vehicle in any way at the time I was at Pitman yard.

Q I misspoke myself. Did you subsequently receive

that door in your laboratory?

A Yes, sir, the door was-- I received this door, which is shown here in court,at a later date.

Q Upon receiving it, did you examine it?

A Yes, sir.

Q State whether or not it appeared to you to be in the same condition when you received it except for being detached from the vehicle as when you examined it and photographed it on September 25th.

A Yes, it was substantially in the same condition as I saw it on the truck. This extra piece, which is an inspection plate, had come off since I had seen it.

MR. REARDON: I don't know what the witness was pointing to, precisely.

THE WITNESS: I am sorry.

(The witness left the witness stand.)

THE WITNESS: This piece was not attached when I received it (indicating).

MR. WALKUP: It's wired to the door.

THE WITNESS: It was wired to the door.

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1 pm

BY MR. WALKER:

Q Did you, after you received the door, make some alternation to it in your laboratory?

A Yes, sir. I was requested to inspect the latch mechanism, and in order to inspect it, since the door was bent, you cannot remove the latch mechanism -- you ordinarily take it through the inspection plate (indicating), but everything was bent and crimped -- so I had to take a shears and cut out and bend this back to get at the latch to remove it (indicating).

Q All right.

And did you remove the latch that was in there?

A Yes, sir.

Q And do youhave the latch that you removed from that?

A I have it, but not with me right now. It is in the next room.

Q I thought you had it in your briefcase.

A No, sir. It is in the coat closet.

MR. REARDON: A little brown box?

THE WITNESS: Yes, sir.

Q While he is going to get that, based upon your knowledge and experience, which you've told us about here earlier, have you had occasion to look at many

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vehicles which have been damaged in collision during your career?

A Yes, sir, a reasonable number.

Q And have you had occasion to look at a number of vehicles so as to be able to determine whether they had been altered or tampered with by others? Do you understand what I mean?

A Well, as an engineer I recognize a piece of equipment when I see it and certain characteristics where you can identify it at a later date.

Q All right.

Now, the latch that you saw on that door on September 25, 1970 at York, Pennsylvania, from your observation of it do you have an opinion as to whether or not that was the same latch that had been in the truck at the time of the accident or not?

A Yes, sir. It --

MR. REARDON: May I have a voir dire on that?

THE COURT: Yes.

VOIR DIRE EXAMINATION

BY MR. REARDON:

Q I think you've been asked whether or not, sir, you have an opinion, based on your having observed equipment that may or may not have been tampered with, whether there

was any change in condition of, I'll call it, the striker and latch mechanism of this particular door from the time you saw it in September until you saw it again at your laboratorywhen the door came to you. Do I understand the question correctly?

A I believe that's the question.

Q And when was it received by you at your laboratory?

A I don't know if I have that recorded. It was a few months later. You want the exact date.

Q If you've got it without any great delay.

A I don't think I have a record of it. I think it was a month or two later.

Q If you come upon it later, will you tell us what the date is?

A Yes, I will. I was asked that before, and I couldn't find it.

Q Okay.

In any event, when you saw the door at the York, Pennsylvania yard in Pitman, all you could see in terms of the latch mechanism was the covering around the latch itself, is that correct?

A Where the latch extends through the door.

Q The latch extends through the door, through this hole that I'm indicating in Plaintiffs' Exhibit 1-A in

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evidence, is that correct?

A That's correct, yes, sir.

Q And then, in addition to the latch that comes through, there is sort of a cover, or they call it maybe a shroud, that goes around that, and you could see that as well.

A There is no shroud to speak of. It is just 3 bolts, 4 bolts holding it.

Q All right.

So you could see the latch and these four bolt holes, right, as shown on this (indicating)?

A Yes. That's correct.

Q I take it until you used the clippers to clip away or shear away the interior panel of the door, you couldn't see any part of the latch mechanism itself, could you?

A That's correct.

Q And of course that feature, the interior feature, is where the latch mechanism is in effect operated from or through or by, is that correct?

A Partly, yes, sir. There are exterior and interior parts.

Q The only exterior part is the latch itself, right?

A Yes, sir. It moves.

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Q And the bolts. And the latch moves.

A And there is a cover plate.

Q That's what I called the shroud.

A Oh. All right.

Q Okay. That's on the outside, too.

A Yes, sir.

Q But you couldn't see anything that was inside.

A No, sir.

Q Could you circle for us on the photograph all you could see? Why doh't you use the right door, if you would, on one of the photographs.

A (Marking.)

Q And of course you could see the striker in its entirety.

A Yes.

Q In September of '70, right?

A Yes, sir.

Q But what you don't know is whether or not between the time of the accident and the time you saw this latch and striker it was in the same condition, is that correct?

MR. WALKUP: That wasn't the question.

A I disagree with you. It is pretty well embedded in that door. It would have been impossible for someone to get it out without my knowing it, because I couldn't

get it out, and I'm quite sure no one else could have without cutting the door to get to it.

Q I'm not suggesting somebody tried to cut it out or get it out or anything of that sort. I'm only asking you whether you are able to say, when you saw it at your laboratory, whenever it was, and took it out, between that time and back to the date of the accident there had been anything done either to the interior of the latch, which you couldn't see, or the exterior of the latch and shroud or cover plate that you could see.

A With reasonable certainty, nothing had been altered.

Q Even though you hadn't seen any part of the interior of the latch mechanism.

A That's correct, because the metal enclosing that had not been disturbed, and it was impossible to get at it without disturbing it.

THE COURT: You had to cut it open with a pair of shears to get at it.

THE WITNESS: Yes, sir.

THE COURT: That is, the surrounding area you had to cut open.

THE WITNESS: Yes, sir.

MR.REARDON: I'll pursue the objection, your Honor.

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THE COURT: Overruled.

MR. SCHWAB: May it please the Court, is this being offered against Pitman or just against General Motors?

THE COURT: It is offered against both.

MR. SCHWAB: I have no objection.

DIRECT EXAMINATION CONTINUED

BY MR. WALKUP:

Q Mr. Ehrlich, the box here, does this contain the latch parts which you removed in your laboratory from the vehicle (handing)?

A This is the striker plate which was attached to the door when it arrived, and I can tell it is the same striker plate because there are marks on the striker plate, which are also in the picture here, which agree.

And this is the latch which I removed (indicating).

THE COURT: Where is this so-called striker plate in relationship to the latch itself in the door?

THE WITNESS: This is the strikerplate, sir, which is right here (indicating) --

Q That is on the frame?

A This is looking forward, this way (indicating). Forward is in this direction (indicating).

This latch engages like so (indicating), and this

is attached to the door, and it swings like this (indicating).

Q Would something like that be conveniently illustrated by the use of a model?

A Yes, sir. I've constructed a model --

Q Would that be the type of thing that would be easy to illustrate with the use of a model, how that actually works in place?

A Yes, sir. Sometimes it is hard to understand how they all work without a model.

Q All right. Sir, you have the latch and the striker plate which you have identified as being in your opinion the ones that were on the vehicle at the time of the accident, correct?

A Yes, sir.

Q Have you examined and studied those in your laboratory?

A Yes, sir.

Q Have you also let them out of your laboratory to be studied by experts for other parties to this litigation?

A Yes, sir.

Q And received and given receipts for such things?

A For the door and for the striker plate.

Q The door has also been permitted out of your

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laboratory --

A I turned this over to Mr. Hirschhorn. I never got a receipt for it. I have a receipt for the door.

Q But except for such times as these as have been out of your possession for examination, you have retained them over there in a safe place, have you?

A In my laboratory, which is locked at night. And during the day my personnel are in the laboratory.

MR SCHWAB: May it please the Court, it is belated, but I object to consel's use of the term "examination by other parties to this litigation."

I think counsel meant, by another party, General Motors, to this litigation.

MR. WALKUP: All right, I'll accept that stipulation.

Q Now, sir, I am going to ask you what we call a hypothetical question and I will make it as brief as possible, and it is preliminary to some other questions that I am going to ask you.

I am going to ask you to assume that on February 4th of 1970 the vehicle which you see depicted in those plaintiffs' exhibits of the colored photographs taken the day of the accident, was pulling a trailer of a type known as a pole trailer, unloaded, similar in sub-

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stantial respect to the photographs which are in evidence as Plaintiffs' Exhibit 89, a series of five photographs, attached to the back of the vehicle, proceeding northbound on the highway, two-lane highway, with a median divider as shown on Plaintiffs' Exhibit 1-A, in the slow, or outside, lane, and the condition of the roadway was icy, with patches of snow, extremely slippery, hazardous driving conditions and a slight down grade; and that there were six men riding in the vehicle, three in the front cab and three in the man cab behind it; that the driver of the vehicle tapped his brake and at that time felt the vehicle go into a skid counterclockwise to the right and continued to skid counterclockwise to the right and that the left front wheel of the vehicle, followed almost simultaneously by the right front wheel of the vehicle, mounted the median barrier curb of some 8 or 9 inches in height, that the rear of the vehicle continued to swing around in a counterclockwise motion, and while the front of the vehicle was going over the center divider and partly into the southbound lane, the rear right wheel of the vehicle struck the curb of the median divider, at which time the truck started to tip to the right, or lean to the right, and eventually fell in a slow manner onto its right side; and that at the time that the vehicle was leaning approx-

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imately 20 degrees to the right, the right front door of the vehicle was heard to give a popping sound and at that time was observed to fly open as the vehicle was turning and continuing to land on its right-hand side; and that after this collision had occurred, the right front door of the vehicle exhibited the configuration and characteristics shown in it at the scene in the photograph to which I have previously referred and also the characteristics which you observed in your examination at York, Pennsylvania, on September 25th of 1970, and as shown in the plaintiffs' exhibit, the door here leaning against the wall of the United States District Court.

Now, I'll ask you to assume further that the speed of this vehicle at the time that the driver tapped his brakes was between 20 and 25 miles an hour and that it appeared to pick up some slight amount of speed in the counterclockwise motion before hitting the curb, and I'll ask you to assume further that the right rear super single balloon tire was deflated at or about the time that it struck the curb a a result of striking the curb and then plowing across the grass island, and that the vehicle and the trailer came to rest in substantially the situation as shown on Plaintiffs' Exhibit 1-A.

Now, assuming for these purposes those facts to

be correct, sir, I'll ask you, first of all, if you have an opinion as to whether or not the door of the vehicle on the right side of that truck was open as the vehicle continued to fall down to its point of rest.

A Yes, sir, I do.

Q And what is your opinion, sir, based on your knowledge and experience, as to that question?

MR. REARDON: I object, your Honor. May I have a voir dire on it?

THE COURT: Yes.

VOIR DIRE EXAMINATION

BY MR. REARDON:

Q Mr. Ehrlich, did the question as you understand it relate to your opinion as to whether the door was open as the vehicle tipped over?

A The question as I interpret it is was the door open -- did the door open as it was turning over or when it struck the ground had the door been open or not? That's the way I interpret it.

MR. REARDON: I'm sorry. Could I have that answer back?

MR. WALKUP: Let me reword the question so there will be no confusion.

THE COURT: Go ahead.

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DIRECT EXAMINATION CONTINUED

BY MR. WALKUP:

Q I asked you to assume in the hypothetical situation that a popping noise was heard and that at that time the door did pop open.

My question now is, do you have an opinion as to whether the door was still open? Because I've asked you to assume that it popped open. Was it still open as the vehicle struck the ground and came to rest?

A Yes, sir, I do.

Q That's the question.

MR. REARDON: I'll withdraw my objection to that question.

Q What is your opinion on that subject?

A It is quite obvious that the door was at least halfway open, meaning 90 degrees or more. Otherwise the force hitting the ground would have shut the door again. Whereas, instead of shutting it -- it may have shut it, too, but it buckled the outermost portion back on itself, as you can see on the door here (indicating).

If the door were partly open, it would just shut it without damaging it too much, whereas it was probably at least what I call halfway open as opposed to fully, 180 degrees, open, and it buckled back on itself.

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Q All right.

Now, sir, assuming those same facts to be correct, for this purpose anyway, do you have an opinion, based upon your study of the latch and striker plate and the facts in the hypothetical question, as to what caused the door to open?

A Yes, sir.

Q Would you state your opinion on that subject?

MR. REARDON: May I have a voir dire, your Honor?

THE COURT: Yes.

VOIR DIRE EXAMINATION

BY MR. REARDON:

Q Sir, have you ever examined a truck striker and latch like this one prior to your examination of this one in 1970?

A No, sir. You mean did I ever see one or did I ever examine one?

Q Examine one.

A No,sir.

Q How many times before you made your examination of this one did you examine any truck striker and latch which had been in an accident, of any kind?

A None.

Q Have you ever written anything at all about what

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happens to strikers and latches on trucks when they are in accidents, either collisions or rollovers or anything of that kind?

A You mean something published in the literature?

Q Yes.

A No, sir.

Q In aid of what you are testifying or proposing to testify about here, did you conduct any tests attempting to simulate on a similar or a comparable vehicle what would occur to the latch and striker mechanism during the course of an accident such as Mr. Walkup has described to you in the hypothetical?

A I did tests with a model.

Q Is that a truck model?

A The model of the door, latch and striker plate and frame.

Q And was that model drawn to scale in any respect?

A Yes, sir.

Q Or prepared to scale?

A Yes, sir.

Q And did it have or does it have a latch mechanism in the precise position that this one would have had, assuming the door were closed prior to the time it opened in the course of the accident?

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A It is in the general position. I wouldn't call it the precise position. The definition of "precise" is pretty hard to come by.

Q I see. Is the model weighted? In other words, did you --

A I understand what a weighted model is.

Q But I don't, so let me change it.

Is the model that you prepared, relatively speaking, of the same weight as the door would have been on this truck?

In other words, if we built the whole vehicle around your model, would it be about the same weight, relatively?

A Well, the model is of about one-quarter scale and it is made of aluminum. The modulus of elasticity of aluminum is about 10 million, that of steel is about 30 million, so the ratio is 1 to 30 instead of 1 to 4. It close but not exact.

To get the exact material that has a scale of 1 to 4, you would have to use some very exotic material.

Q You may have lost me a little bit there. Are you saying that your door model is much lighter than the door model, the door on this truck, relatively speaking?

A It happens to be stronger, relatively speaking.

Q I mean lighter. I don't mean weaker. In weight.

A In weight it is only a portion. I never weighed the door and the frame, so I couldn't tell.

MR. REARDON: I am going to object, your Honor.

MR. WALKER: I have some more questions with reference to door latches.

BY MR. WALKER:

Q How many years have you been familiar with the operation and construction of various types of doors and truck latches in your professional work?

A Well, I've been involved in automotive vehicles for 24 years. Up until this, I got involved in this case, I admit that I was not really interested in latches and strikers and the detailed design of them, but when I got involved here I went into quite a lot of study about them.

In the previous instances, only from a curiosity standpoint, I observed the design of different latches, how they changed with time, how they improved with time, how early latches -- I was aware that early latches would pop open. In about --

MR. REARDON: With all due respect to the witness, I think that this is --

THE COURT: That goes to his background and general competence in this area. You raised the question.

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I am going to allow him to describe his experience now.

A (Continuing) I was aware in about 1956 they came out with, some people call it an anti-burst lock and some people call it safety door lock, to keep latches from separating, and in time this has been improved upon. One of the big problems of accidents is the door coming open.

MR. REARDON: I object to that, your Honor.

THE COURT: You object to what?

MR. REARDON: "One of the big problems in accidents is doors coming open."

THE COURT: We'll strike that out.

MR. REARDON: Yes.

BY MR. WALKUP:

Q Have you, in addition to your knowledge and experience in mechanics and engineering that you've told us about, studied literature in the field of reports and studies by various universities?

A Yes, sir. There have been some extensive studies in Cornell on the opening of doors in accidents. I was aware of that study at the time. There have been other tests since then at UCLA.

Q And in the field of engineering, do you gain as part of your body of knowledge the results of studies

of other scientific engineering groups with relation to various problems of automobiles?

A Yes, sir. I am a member of the Society of Automotive Engineers, which has a journal called Automotive Engineering, and I get that every month and I read through it. I don't necessarily read every article, but I examine it and see what is of interest and read many articles in it. I keep abreast of the literature.

Also there are a number of reports made by other researchers. It is a common practice, if you are in a field, to send your reports to other associates in the field, and they send their reports to you. Many, many reports pass my desk, which I either read or file away for future reference.

MR. WALKUP: I submit the previous question.

THE COURT: The Court holds that the witness is competent to testify with respect to the subject matters as to which he was questioned. This comes within the area of his general competence.

I should tell the jury, as I'll tell them eventually in the charge --

MR. REARDON: I can't hear you, your Honor.

THE COURT: I will tell the jury, as I will tell them eventually in my instructions, that the testimony of

experts is subject to your evaluation. This is a matter which you may or may not accept, according to how you evaluate the testimony of experts.

Usually, experts are called with respect to matters that are not within the ordinary knowledge or ken of the average person, and these opinions are submitted to aid you in your determination. The questions are based on matters of testimony that are heard before you, and whether or not ultimately you accept the opinion of any expert depends upon your own resolution as to whether or not you think the testimony is credible, is based on competent experience, and the general qualifications of the expert.

It may be answered.

MR. WALKUP: It has been a while since I asked the question, sir.

THE COURT: You want the question read back?

MR.WALKUP: I think that it would be easier than restating it.

THE COURT: Take the last part: Do you have an opinion you can express?

BY MR. WALKUP:

Q Do you have an opinion as to what caused the door to open, why it opened?

A Well, I have an opinion as to why it opened,

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yes, sir.

Q All right.

A In my opinion --

MR. REARDON: I take it this is with a reasonable degree of engineering certainty.

THE COURT: Yes, sir.

You are able to express this opinion with a reasonable degree of certainty?

THE WITNESS: Yes, sir.

THE COURT: Based on your experience in this field.

A (Continuing) A vehicle, although it is built of steel and quite sturdy, is still flexible and will warp and change and distort according to known laws of physics, depending upon the forces imposed upon it.

This vehicle, while it was turning over, undoubtedly twisted in some manner, the front wheel hitting first and the rear wheel swinging around, the entire frame of the vehicle twisted and the superstructure twisted with it.

This allowed the latch to become disengaged from the catch by the motion, the twisting motion, of the frame and the door, door frame, and the latch was allowed to separate from the catch and strike a plate.

MR. REARDON: Subject to your Honor's ruling,

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I would just like to move to strike the word "undoubtedly".

THE COURT: Yes. Strike that word.

That's your opinion.

THE WITNESS: Yes, sir.

Q Will you state the basis for your opinion as to why that particular latch opened and under those circumstances?

A Well, the way it's designed, you see that --

MR.REARDON: Your Honor, may I please examine on this? I want to ask if this gentleman ever designed a latch.

THE COURT: No, I will hold, in the light of his testimony as to his background and general experience in this area, that he is competent to give an opinion.

A The way the latch and the striker plate are designed --

THE COURT: Pardon me, I will interrupt you. You may cross examine him on it.

MR. REARDON: I know. I don't think this is in evidence yet, your Honor.

MR. WALKUP: I will offer it. Thank you. It has a number on the list of exhibits.

THE CLERK: The original latch is 74 for identification. The original strike plate is 75 for

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identification.

(Plaintiffs' Exhibits 74 and 75 for identification were received in evidence.)

xx

THE COURT: All right, we interrupted the witness. Suppose we reread the start of his answer so he can pick it up.

(Answer read.)

A First of all, to look at the latch, the latch is designed so that when you push this lever, which is usually connected to some external device, the latch --

MR. REARDON: May I approach the witness, your Honor? I can't see back there.

THE COURT: Yes.

A The latch trips, and that is how it opens, and you can open the door. When you close the door, it hits the -- it ivots the catch and catches, and that's how it stays in place.

You will see that this rocks back and forth closing the door. This is on the door. This is on the frame. The door, the striker plate, and that is why it is called a striker plate and trips the lock, locking the door, and to open it you push the button which is connected to a handle opening it.

The way this is designed, distortion of the door

or frame, either one, will allow the two to separate, and in the midst of an accident, come apart.

Q That particular design that that latch has, in your opinion, as of the year 1966 when this truck was built, was that design at that time for a truck latch -- will you state your opinion as to that period of time when truck latches as to that type of latch?

THE COURT: I don't understand the question. I think you better reframe it.

MR. WALKUP: Your Honor, with reference to the matter of inspection of the models, I think at this point I could really proceed much more intelligently if we could resolve that, and since it's close to the 5 o'clock adjourning hour, I think it would make for a more intelligent presentation for all concerned if we would let the gentleman look at the models.

THE COURT: All right. The witness is excused.

I told the members of the jury the other day that I have a fair number of matters on tomorrow morning, including some sentences and a call calendar. There are 81 civil cases and two sentences.

I am just trying to figure out the best I can. I think that I should be completed with my work by 11 o'clock tomorrow morning. I am starting at 9:30, so I would suggest

you be inside so we can start at 11. If I don't call you by 11, you will understand that I still buy in the courtroom and I will call you as soon as I can.

So you don't have to come in tomorrow until a few minutes before 11, and I will try to start as promptly as I can, but just as I say I can't work on a railroad schedule, sometimes lawyers will extend themselves a bit beyond what I expect; but hopefully we will start at 11, and if not, you will understand that I will send for you just as soon as you are ready.

I will say goodnight to you all.

(Jury left the courtroom.)

THE COURT: Have you gentlemen resolved this other question?

MR. REARDON: We are going to go and take a view of the situation right now, your Honor, and in any event, I think the matter is going to be the subject of an objection and a voir dire tomorrow, if your Honor will permit it, at least the voir dire.

THE COURT: I will allow a voir dire to you, but you got up on the last point really on a matter that is the subject of cross examination rather than voir dire. That is the only reason.

MR. REARDON: On the design aspect?

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THE COURT: No, on the last point that you were making here, we have gone over that before. That was the question of whether or not he was qualified to give an opinion as an expert.

MR. REARDON: We are going to look at this now.

THE COURT: All I am saying there is you can examine him as thoroughly as you want to as to his expertise in this area. I didn't think it was the subject of further voir dire; that is all.

How do we start tomorrow morning?

You mean we will be starting with a voir dire tomorrow morning? I suspect that counsel interrupted his direct examination because he wanted to reformulate some of the questions he had in mind.

MR. REARDON: I had that feeling too.

THE COURT: But it was the end of a long day, and I consented to the adjournment.

MR.WALKUP: That may have been a part of it, your Honor, but I do think that, to explain this the models are so much more helpful.

THE COURT: Then it may be the first matter that I will have to take up in the morning.

You heard what I said to the jurors. Hopefully we will start at 11 o'clock, and then we will go through

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without a recess break tomorrow morning until lunch hour because in effect it's the second half of the morning.

MR. SCHWAB: Could we go off the record for one second?

THE COURT: Surely.

(Discussion off the record.)

(Trial adjourned to Friday, March 1, 1974, at 11:00 a.m.)

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David Lane and Mary Ann Lane

v.

71 Civ1 986 (EW)

General Motors Corporation,
A.B. Chance Company and
Pitman Manufacturing Company

New York, March 1, 1974
11:15 a.m.

(Trial resumed, jury prsent.)

I. ROBERT EHRLICH, resumed.

DIRECT EXAMINATION CONTINUED

BY MR. WALKUP:

Q Mr. Ehrlich, I would like to back up for a moment and go into a little more of the details of the total latching mechanism on this vehicle on the right-hand door. You showed us yesterday the latch and the striker plate, which came in that little brown box.

Are there other parts to the total locking system?

A Yes, sir. They consider that the wedges on the door are part of this locking system. There is a wedge right here (indicating) --

Q When you say "right here," could you designate in some manner for the record?

A It is on the bottom part of the part which is cut out to allow the wheel well to fit in.

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Q Maybe on one of these large pictures, if you could, because that door is bent, of course. I am referring now to the Exhibit series 80-A-1 and following that were introduced yesterday.

I will give you the one of the opposite door, which is 80-K-1 and I also hand you one showing the overall configuration of the truck, which shows the door in position on the truck, and that is 80-A-1.

Now, with those and possibly if you could stand a little closer to the jury but not to block his Honor's view and show us then the location of these other elements of the total latching system.

A This is a picture of that wedge. You can see the wedge here (indicating). It is a spring loaded wedge. It can move back and forth. There is a spring here.

And this wedge is located right here (indicating). I can move it back and forth with my fingers (indicating).

And on the door you can see that wedge right about here (indicating).

And it would engage or rub against a plate which is right there when the door is closed (indicating).

Q You are referring to which exhibit now?

A I refer to Exhibit 80-A-1, 80-K-1 and 80-O-1.

MR. WALKUP: May I have the witness, your Honor,

with the pen, draw an arrow to those, because this is not quite as apparent as the stop sign, for instance, that has been designated on some of the other pictures?

THE COURT: All right. And mark what they are, or what you are referring to, alongside the arrow.

THE WITNESS: Yes (marking).

Q His Honor has asked that you designate on there a name for what you have marked, sir. And, if you will, put an arrow away from that so you write on some part and don't cover up anything that you have circled.

A Well, I would call this a wedge, or a spring loaded wedge.

MR. REARDON: Is that the one on the lower part of the door?

THE WITNESS: Yes, sir (indicating).

Q Why don't you indicate "lower part of door"?

A (Marking.)

Q Is that the only one, incidentally, that is spring loaded?

A Yes, sir.

Q And by spring loaded, I think on closer examination of that picture the jury can see it but maybe not from this distance, how does the spring loading work on that bottom one? I mean --

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A When you close the door, the spring will back up a little bit and stay firm against the corresponding wedge in the door sill, which I indicated here, which I will call the sill wedge (marking).

Q And which part of the door is that upon?

A And that's right here (indicating), where the purple arrow is.

Q Does that that you have just indicated with the purple arrow correspond with when the door closes the spring loaded wedge?

A Yes, sir.

Q Could you indicate that in some way to contact spring loaded wedge?

A Yes (marking).

Q Now, so we will further understand the total latching system, you have indicated there is some type of device on the top of the door.

A There is another wedge up here (indicating), which is almost opposite the one down below, and I don't think we have any pictures of that.

Q But then, to get in the record some word description of that --

A That's just a stationary wedge. That does not move It is just a bearing plate or wedge.

jgbr 655 Ehrlich-direct

Q Now, I see here what looks like a door hinge down at the bottom (indicating).

A That is correct.

Q So would I be correct, just for purposes of the record, in saying that the plate at the top is on the side of the door away from the springs and --

A Away from the hinge.

MR. REARDON: No, away from the hinge.

MR. WALKUP: That's what I meant. Excuse me.

Q Away from the hinge. And do you have a little ruler or something that you carry with you so you can give us the approximate distance it is from what would be the part of thedoor that opens?

A It is approximately 8-1/2 inches from the center of the wedge to the edge of the door.

Q All right. What does that wedge engage in the total latching system in that door?

A There is a corresponding wedge -- you can't see it -- in the roof of the truck. The defect in this design is that --

MR. REARDON: Objection, your Honor.

THE COURT: Yes. The objection is sustained.

A I beg your pardon?

THE COURT: I sustained an objection when you said

a defect in a design. That is a determination to be made.

MR. WALKUP: That was not my question at this point, sir.

Q The wedge that is at the top of the door, 8-1/2 inches or whatever you just told us --

A Yes, sir.

Q -- strikes a plate when the door is closed that is on the frame of the door?

A Yes, sir.

Q In juxtaposition, when closed, to that plate, correct?

A Right, yes, sir.

Q Now, you have indicated the bottom one was spring loaded. Is the top one spring loaded?

A No, sir.

Q But it is a wedge, and by a wedge is there an angle in one direction or the other?

A Yes, sir.

Q And what direction is the angle?

A The angle on the door is down this way (indicating), and the angle --

MR. REARDON: Down meaning --

A The angle in the door frame is also that way,

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so they wedge together, down. Down going inward I guess is the best way to describe it.

Q We talked yesterday about models and your esperience in model making and the fact that you had made a model of this door and hinges and the frame surrounding it. Preliminarily, in that model do you show the location of these wedges, top and bottom, that you have referred to and also the wedges which correspond with and work with them whtn the door opens and closes?

A Yes, sir, I have.

Q And have you also in that model that you have told us about made --

MR. REARDON: I object to this form of examination, your Honor, as to something not in evidence.

THE COURT: I think he is leading up to it. That is the reason he is putting the questions.

MR. REARDON: I object then to leading. Perhaps that is the objection.

THE COURT: Avoid leading him.

Q I will ask you, sir, what your model that you made encompasses with reference to what you have told us about here in court and shown us here in these pictures.

A Because it is hard to visualize exactly how everything goes together and works together, I built a

model which is approximately a quarter scale, to demonstrate -- it is a demonstration model. It is not an exact scale model. That would be very expensive to construct. But it is what I call an approximate model.

THE COURT: Is it a substantial replica of the door and the entire mechanism of the door?

A It is a substantial representation of what the door does and the mechanism does. It does not operate like this (indicating). That would be too intricate to make in model form.

Q When you say "like this," --

A I do not have all the little --

THE COURT: Gadgets within --

THE WITNESS: No, sir. It is a mockup, what I would call, of the door.

Q Now, for purposes of illustration and --

THE COURT: Excuse me one moment, please. Just hold it.

(Pause.)

Q For purposes of illustration and explaining to a group of lay people who are not engineers by and large --

MR. REARDON: Just to save a little time, maybe counsel would accept this. I have seen the model.

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Now the jury has heared about the model, I think it would be inappropriate for me not to let them see the model under certain --

THE COURT: I was going to say I would assume his purpose would be to demonstrate the door as the witness has explained the different parts of the door. It is really for demonstration purposes.

MR. REARDON: Yes.

THE COURT: To make his testimony clearer to the jury.

MR. REARDON: If he can agree that it merely is a model to show in sort of a gross way the way the door would open and close, without there being precise definition of any of the parts, I would be willing to have it be received.

THE COURT: I think that is the purpose.

MR. WALKUP: That is the purpose of the offer, for purposes of illustration and demonstration.

THE COURT: All right.

Q Before we physically bring the model, which is in the next room, sir, I am going to ask youto do one other thing. There is a small piece of blackboard available here, or I could make a little larger piece, I guess.

I am going to ask you, if you could, with a

very simple, basic drawing, to show what you were trying to show us up there with those small parts, just to understand, as to how the striker plate and the latch in that particular model have latch engagement. That is, when the door is closed, what is the juxtaposition between the part of the striker plate that engages the part of the latch mechanism which relates to the striker plate? Just that basic, simple part.

A On the door frame is the striker plate, which is like this (indicating). So you have this part here.

Q You can make it a little larger, if you want. I guess that is advisable.

A And then the door itself is the latch, they call this the rotor, and the rotor sets like that. There is a little plate over in front which hides your seeing the rotor.

MR. REARDON: Do they call that like a shroud or a cover, whatever you want to call it?

THE WITNESS: A cover.

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Q You've indicated now a dotted line, and to me it is invisible, the dots.

A All right (marking).

Q That's better.

Now, while you are at it, would you label the two parts?

A I call this the striker and I call this the rotor (marking).

If you trip the latch, the rotor then will rotate. I'll put the striker again.

MR. REARDON: You mean open the door?

THE WITNESS: If you go to open the door, you trip your latch.

Let me get the right perspective. It will rotate like that. As the rotor rotates when you open the door, it rotates like in this position, roughly (indicating), and then you can move the door open with respect to the striker. The striker stands still on the door frame and the door will move open.

Q All right. Would you put an arrow for the direction of opening, although I guess that is probably obvious?

A Yes (marking).

MR. REARDON: I'm sorry. Your Honor, only for

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clarification, I think what we ought to do with this is get an understanding of whether we are looking at a right side door with the door open so that you could look at the rotor, shroud -- or I don't understand it otherwise. Maybe you can help me.

MR. WALKUP: Yes. I'll try.

Q Can you clarify, sir, which way you are looking at it in this drawing?

A Just to make sure, I'll look at the picture.

MR. REARDON: Maybe I misled you.

THE WITNESS: This is a picture of the right door and looking --

Q What number are you referring to, for the record, on the back?

b2

A 82J1.

Q Thank you.

A And we are looking at the striker plate this way (indicating), and the door opens this way (indicating).

This is the door. The door is moving to the left in this picture, as it would if you were looking at this striker plate looking rearward.

MR. REARDON: The door would be opening at you.

THE WITNESS: Yes, the door would be opening at you in this picture. It would be opening to the left on

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the blackboard.

Q As you've indicated by the arrow.

A Yes, sir.

Q All right. Incidentally, sir, just for purposes of clarification, are you contending that there are any broken parts or poor quality parts in that latch which you found?

A No, sir.

Q So what you are talking, then, about is the design of the latch rather than any broken or missing parts, or rather any improperly fabricated parts, correct?

A The entire door latching system.

Q All right. So that --

MR. REARDON: I didn't understand the answer.

THE WITNESS: The entire door latching system.

MR. REARDON: Mr. Walkup, there is no claim here that there is anything, other than with the design, wrong with that latching mechanism system.

MR. WALKUP: That's correct.

THE COURT: In other words, your question was, there is no defect in any of the physical parts of that exhibit in front of you.

THE WITNESS: That's correct.

MR. WALKUP: That's correct.

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THE WITNESS: There is none.

Q So your testimony here, then, is limited to the design of this particular system as of the time involved.

A Yes, sir.

Q Now one further thing preliminary to the showing of the model, because the model is on a different scale.

In actuality, from looking at the latch that has been identified here and is an exhibit -- and I may use inappropriate terms, not being an engineer -- how much dimension, or I'm going to say overlap, is there here (indicating) when the door latch is engaged between the tip or pointed, rounded part of the striker, the downward part on your diagram, and the upper parts of this sort of half moon shaped rotor.

A Well, there were marks --

MR. REARDON: Excuse me, your Honor. Just and only for clarification, because counsel has referred to the blackboard and pointed to the diagram at the right -- is that correct?

MR. WALKUP: Correct (indicating).

MR. REARDON: -- could we have the witness tell us, I assume he has already done it but it is not on the blackboard, if that is with the door closed and locked?

THE WITNESS: Yes, sir.

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MR. REARDON: Rather than open? The one on the right is locked, the one on the left is open?

THE WITNESS: That's correct.

MR. REARDON: Would you write that in?

MR. WALKUP: It is in a position to open.

MR. REARDON: In a position to open. Correct.

Q You write it.

A (Writing)

MR. WALKUP: For the record, your Honor, may I offer this drawing as the plaintiffs' next exhibit? And I'll arrange to have it photographed so we can have a photograph of it introduced in lieu of the material on the blackboard.

THE COURT: I take it there is no objection.

MR. REARDON: I have no objection.

MR. WALKUP: May it have a number?

THE COURT: What is the next number?

(Plaintiffs' Exhibit 99 received in evidence.)

THE WITNESS: To measure the engagement, you can put the two pieces together and measure the distance, that distance there (marking).

MR. REARDON: Would you describe what you have drawn?

THE WITNESS: The distance from the bottom of

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the striker to the top of the rotor, and it is slightly less than a quarter of an inch. We'll say it is a quarter of an inch (marking).

MR. WALKUP: I guess this would be an appropriate time to offer the model subject to the understanding pressed by the Court and counsel.

Q Dr. Ehrlich, do you know where it is?

A Yes, sir. It is in the closet.

Q Would you go bring it, please? And bring at this time the model that we've been talking about.

(Pause)

THE COURT: Before you go ahead, I meant to ask this several times: With respect to the actual door itself, which was on the truck and which is an exhibit in front of you, is that in a position in this courtroom in which it was on the truck at the time of the accident? In other words, the vehicle was proceeding north and then veered b3 in a westerly direction and went over the other side.

MR. REARDON: I think it was agreed that the front of the vehicle would be facing towards your Honor and the rear would be that way (indicating).

THE WITNESS: This is the front, here (indicating).

THE COURT: In other words, you would have to turn that around to get that door in the position it was in

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at the time of the accident.

MR. REARDON: Right, your Honor.

Q The hinges--

A -- are forward.

Q -- are the forward part and the rearview mirror the rear part.

A Correct.

THE COURT: It really should be turned around insofar as it was at the time of the accident.

MR. SCHWAB: I don't understand that, myself. You say turned around if you want to be inside the vehicle?

THE COURT: No. If the plaintiff was seated in the front right seat, then this is turned in the opposite direction from the way it was at the time of the accident. Isn't that correct?

THE WITNESS: Well. --

THE COURT: Where is the rear of that door?

THE WITNESS: The rear of the door is in that direction (indicating).

THE COURT: That is exactly what I am saying. If you are going forward, the rear would be going this way, towards me, and it is away from me here.

If anybody disagrees, let them state it. But it seems that way to me. The plaintiff was seated right

in the front. There were three seats. That door was alongside of him. Obviously the rear of the door, the hinge part, would be in back of him.

Isn't that so?

THE WITNESS: No, sir.

THE COURT: It would be in front?

THE WITNESS: Yes, sir.

MR. WALKUP: It opens in this manner: if I am Mr. Lane and I am sitting here, the hinges are in front of me and the door opens behind me.

THE COURT: Where is the hinge on this exhibit?

THE WITNESS: The one hinge here and one hinge fits rights in here (indicating).

THE COURT: Then the hinge should be in the front and that should be turned around.

MR. REARDON: But if you turned it around, you would then be looking at the inboard side.

THE WITNESS: Looking at it from the plaintiff's viewpoint, you would be looking at it here (indicating).

MR. WALKUP: That's right. Mr. Lane, of course, would see the inside, and we can turn it around easily, somewhat easily, when we finish this part and show what is inside or what is left of the inside after the removal of the latch.

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BY MR. WALKUP:

Q Before you do that model, Mr. Reardon I think directed my attention to this.

You have made a small circle on Plaintiffs' Exhibit 80K1, but there is no label on it. Would you kindly, as you did before, draw an arrow to that and label that?

A (Marking)

Q Left door, for illustration purposes.

A (Marking)

Q And one other thing. I'm sure there is no confusion here, but for records, for other purposes later possibly, I would like you to designate two other items that you have that might show more clearly.

On Plaintiffs' Exhibit 80K1, which is the undamaged left door, will you draw a circle around the rotor?

A You can't see the rotor. All you can see is a little tip of the rotor up behind what you would call the--

MR. REARDON: Cover or shroud.

A (Continuing) -- shroud. The rotor is sticking up because the door has been opened (marking).

Q Why don't you put "shroud" there too so there will be a record of what that is? You are calling it a cover plate.

A (Marking)

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Q Then it is marked. But if I may just add here, this would be the same on the damaged door, what you've circled in red, for the record, on 8011, correct?

A Yes.

THE COURT: Let me see those two, and let's move along, please.

Q Would you, sir, turn the model so the Court and jury can see it, and explain the mechanisms of the door with the model?

MR. SCHWAB: May the model be given an exhibit number, for the record?

MR. WALKUP: It has an exhibit number already on the list.

MR. HIRSCHHORN: Exhibit 78.

MR. WALKUP: Possibly, if this table would be agreeable, you could see it, counsel could see it and the jury could see it.

THE COURT: All right.

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2A Q Would you explain now on that model the working of that door and latch?

A This is the door --

Q Let's figure out first --

A This represents the door.

Q Mr. Lane would be where with relation to your model?

A This fits in this perspective like this (indicating), and Mr. Lane would be where I am, here on the inside.

Q All right.

A This is the outside. The door opens outward. This is the front, and this is the rear. The hinges are down below to the right or down below forward, this being one hinge here, and there is another hinge that mounts in here, which was -- remained on the vehicle when they took the door off.

Q Incidentally, just to clarify another point, did you find any damage to the hinges?

A No, sir.

Q All right.

A This represents the rotor assembly with the cover plate or shroud, and the contour of the rotor.

Now, this does not move like the rotor moves --

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THE COURT: When you say "this," what are you referring to? You say "this" does not move like the rotor.

THE WITNESS: This represents a rotor, but is fixed in my model, whereas the rotor on the rear latch actually moves.

MR. REARDON: When you say "this," you mean that protrusion on the edge of the door?

THE WITNESS: This block of aluminum here, and this small plate represents what they call the shroud, this plate here.

This represents the tongue part of the striker plate, which is right here. You can see that.

This is a wedge at the top of the door, and the top of the door frame, and another wedge at the bottom of the door frame and the bottom of the door in approximately the proper position.

Q Which one of those is the spring loaded one?

A This one is the spring loaded one. In my model it's not spring loaded.

THE COURT: How many wedges are there?

THE WITNESS: There are four, sir.

Q Will you illustrate in connection with that model and your diagram and the other evidence that is here why you told us yesterday that in your opinion the door

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popped open due to the latch?

A Well, this latch has a basic defect in design which, because if the frame warps or the door warps in an accident, it can just close or open at will with very little force.

Q You say the frame warps. Can you illustrate which part of the frame you are talking about?

A Well, this frame could distort, the door could distort, anything, to allow this to distort with the hinges. Any distortion on the frame can allow the door to open and close without turning the latch.

The cams or the wedges do not prevent that.

THE COURT: When you talk of the frame, that is the area into which the door fits.

THE WITNESS: Yes, sir. This part here I call the frame, the door frame.

THE COURT: You say either one could be distorted.

THE WITNESS: The door frame could distort. The hinge could distort, or the door itself could distort or a combination of all of them, which is what would happen in a twisting action when the vehicle rolls over.

Q In such case, and you have given us a measurement of a quarter of an inch, how much distortion would there have to be in the accident or collision to cause the lock

to disengage?

MR. REARDON: I am going to object, your Honor, because the striker and latch mechanism, rotor which the gentleman has been using have not been established by anyone nor conceded by me to be in the same condition they were in as of the time of the accident, as of the time this gentleman saw them. He has made a measurement and indicated a quarter of an inch. That doesn't establish anything in terms of the lock itself as it left General Motors or as it is designed to be. I don't think there is any foundation for it.

THE COURT: Have you also examined the lock mechanism on the left door of this car or truck?

THE WITNESS: Did I examine that?

THE COURT: Yes.

THE WITNESS: Yes, sir. I did not make any measurements.The maximum engagement possible when the strike plate is touching the bottom of the cam is a quarter of an inch.

THE COURT: I will take his answer. This is built approximately to a quarter scale, in that the hinges are spaced a quarter of the distance of the regular hinges, and the door is roughly a quarter of an inch, and the engagement in this model is about an eighth of an inch, so it's about half of the engagement on here, so it is

proportionately more engagement in my model than that was on the door.

Q There was some reference the other day here to the ordinary car door latch, and I think as a matter of common knowledge, at least, some cars have a button you push down that sticks up on your door by the window. Did this particular latch assembly have that type of a lock button that you push down?

MR. REARDON: I conceded the other day it didn't.

MR. WALKUP: I am sorry, I didn't realize you did, and I accept then that as a stipulation by General Motors.

MR. REARDON: That it didn't have a button.

MR. WALKUP: All right.

Q You referred a moment ago to the defect in the design,and limiting it to design, are there any safety features in there other than the safety features you have already told us about?

MR. REARDON: I object to that question.

THE COURT: On what ground do you object? That you don't understand it?

MR. REARDON: I guess to the form of the question, your Honor. I don't know what possible answer it could lead to, and I am not in a position to intelligently object because the question is so vague. I respectfully suggest--

MR. WALKUP: I will repeat the question.

THE COURT: Try to reframe the question so counsel will understand it.

Q You referred in your questions on voir dire by Mr. Reardon about your qualifications to what is known as a safety type of door latch, correct?

A Yes, sir.

Q I am asking you if this type that is shown by the model and which was in effect on the truck door was the type that you referred to as a safety door latch?

MR. REARDON: Objection.

THE COURT: That is sustained.

Q With reference to this door latch, will you explain the design defect that you mentioned in your previous testimony, what that design defect, in your opinion, was?

MR. REARDON: I object, your Honor. It's repetitive.

THE COURT: He has already answered it, and it's his opinion. I will allow him to explain it if it requires further explanation.

I thought he had explained it, but it requires further explanation, I will allow him to do it.

A The major defect, as I see it, is that they separated the devices which were intended to keep the door latch engaged. Of more advanced design, which was common

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knowledge and used--

MR. REARDON: Now, your Honor, I object to that.

THE COURT: Yes, I will sustain it as to common knowledge. Describe your own opinion, and this is your own opinion as to what the defect is.

A Yes, sir. In my opinion the latch should have encapsulated, completely encapsulated the striker so that it could not come apart without rendering the metal parts.

THE COURT: Encapsulated in what manner?

THE WITNESS: Well, I have a model I can show you how they encapsulate it.

THE COURT: If that is descriptive of his opinion, I will allow him to demonstrate the model.

MR. WALKUP: That is the other model that counsel has seen.

MR. REARDON: May I approach the bench on this?

THE COURT: Yes.

(At the bench out of the hearing of the jury:)

MR. REARDON: This is, I take it, a model from an automobile, not from a truck. No foundation has been laid to indicate anything about the trucks with this kind of model he has here.

MR. WALKUP: I can lay the foundation very easily.

THE COURT: We will go into the robing room

for a moment.

(In the robing room, counsel present:)

MR. REARDON: If your Honor please, the model which counsel and the witness have now referred to is, as stated to me by Mr. Walkup, and as observed by me, a latching and lock mechanism from an automobile.

MR. WALKUP: '66 Oldsmobile, I believe.

MR. REARDON: I don't know what year it is. I have no idea what it is.

I think it would be highly prejudicial for that mechanism to be shown to the jury, and to have them told that it was a mechanism taken from an automobile, whether manufactured by General Motors or not. I don't think there is any basis for comparing the two, at least that I know of at the moment, in the record; and if all the witness is doing is showing another design of latch, I think the prejudice far outweighs the benefit to the plaintiff.

He has explained that he thinks it should have been completely encapsulated. I know of no foundation that he has provided in the form of his qualifications for the design of latches, or anything else, which supports the suggestion that this ought to be received for the purpose it is being offered, and I object to it, your Honor.

MR. WALKUP: Number 1, if your objection is that

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it is an automobile latch rather than a truck latch, I will offer to prove, and he will also testify, and I have discussed it with him, that it's the same basic principle and works in the same manner and will illustrate the manner of complete encapsulation which is, instead of the rotor that just sets on top, a device that goes around and locks on to a bar that sticks out like you see on your own car; and it is restrained in all directions so that there can be racking of the frame, there can be twisting and torsion forces, and actions which are reasonably to be anticipated, and the door will not open because it can't disengage.

Secondly, with reference to whether he uses an automobile or a truck for a model, he can over the weekend get a truck model. I told him not to use a General Motors truck because General Motors put this on the following year on their trucks, and I take it that we are precluded from showing this or subsequent changes for safety, at least with this witness, although it might well come out with some of your design engineers when they are here.

If you want him to get a General Motors truck latch, it's got to be from a '68 or '69 model. If you want him to get one from another truck, other trucks of other manufacturers had what he is contending for, according to the

literature which you are familiar with, years before this.

MR. REARDON: On trucks?

MR. WALKUP: Yes, he can get a--

MR. REARDON: Your Honor, my objection is that, to make it more fundamental, this is a design claim. We should be held to a standard with respect to what we sold and what we made as of the state of the art at least at the time we sold it and made it.

I don't think showing a passenger car door locking system which, to me at least, has some obvious differences in design requirements, should be received in evidence.

If counsel is suggesting that they have got truck locks which establish that the state of the art for truck latching mechanisms as of the time we made this in 1967, early 1967, that may be an entirely different posture.

THE COURT: What are the obvious differences between its use on the truck and a car? I don't know what the witness would testify to. I will allow counsel to examine. If he testifies basically there are no differences, the same concept can be applied to either one, why isn't it admissible?

MR. REARDON: Well, we made a truck, and the issue is whether the state of the art --

THE COURT: Counsel has suggested that, out of

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regard for your position, he doesn't want to come in with a GM lock which was used a year later on a truck. He is suggesting that the witness can state, at least as I understand it, he will testify that there were trucks tha had this design which apparently GM put on later on; and he simply saying -- correct me if I am wrong --

MR. WALKUP: Yes, your Honor.

THE COURT: -- that it could have been used on a car, passenger car; it could just as well have been used on a truck.

If that is the witness' testimony, I will allow a voir dire on it.

MR. WALKUP: I think it goes to the weight rather than admissibility and fully could be developed on cross-examination, and I am sure it will be.

THE COURT:In other words, the contention is based on what the witness already testified to, that there was a mechanism or device which would have prevented a jarring and an opening of the lock. This is really what he is saying. It is very simple language.

MR. WALKUP: Of course, the court hasn't heard this yet, but there is a body of literature in the SAE that goes back to early 1955. Studebaker first started using the safety or non--

THE COURT: I think I will let him testify, but you develop it, and Mr. Reardon, I think you know under the federal rules, if you want to make an objection, you are free to make it, and you have an exception.

MR. REARDON: I understand, your Honor.

MR. WALKUP I will not ask him about the General Motors truck lock, obviously, in '69.

MR. REARDON: Is your Honor going to permit reference to automobiles, cars, with this foundation?

THE COURT: No, he has to lay the foundation for it. I assume he is going to question the witness along the lines to indicate, as I understood the statement, that it doesn't make any difference whether the mechanism is applied to a truck or a passenger car. The principle is the same.

Is that right?

MR. WALKUP: Yes. I will again state this is for purposes of illustration. It is not intended to represent exactly what might be on a truck, but it is the same identical principle, and for purposes of illustration it will be helpful.

THE COURT. All right.

(In open court, jury present.)

THE COURT: All right, proceed, please.

BY MR. WALKUP:

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Q Mr. Ehrlich, could you at this point bring in the other model to which you have just referred?

A Yes.

MR. WALKUP: Could we have that marked at this time, then?

THE COURT: Yes.

MR. WALKUP: I don't know what number we are up to.

THE COURT: The members of the jury will understand that this is being allowed in evidence only for the purpose of permitting the witness to better describe what he is referring to, and so that the jurors can follow more readily the basis of his testimony.

(Plaintiffs' Exhibit 76 marked for identification.)

Q Now, sir, preliminarily, what type of latch is that commonly known as?

A This is commonly known as a safety door latch. Some people call it an anti-burst latch.

Q Can you tell us, first of all --

MR. REARDON: I take it, your Honor, it has been offered? I object, as I have indicated in chambers. I didn't know it was received.

THE COURT: I said it is being received only for demonstration purposes, so the witness can better describe what he is referring to, and so hopefully the jury

will better understand his testimony.

MR. WALKUP: Thank you, and that is the basis.

THE COURT: It is almost being received in the same way we receive an aide memoire in other cases.

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Q Sir, just preliminarily, this particular model that you have there now, this is not a quarter scale model as the other one, is it?

A No, sir, this is an actual door latch I -- we went to a junk yard and took off a record vehicle.

Q What model vehicle is it?

A This was off of a 1967 Oldsmobile.

Q Will you illustrate to us what you referred to, using that model, as the complete encapsulation in this anti-burst or so-called safety latch?

A This is the door, which you are undoubtedly familiar with --

Q If you could move the other little model out of the way, just to avoid confusion.

A This is your lock. If you push the button --

THE COURT: I think if you turned it around that way, the jurors will see it better, or put it down on the table there, and I think it will be a little easier for everybody.

A This is your locking mechanism for the inside, and you push the latch in and it cannot open. When you unlock it, you push the latch in and it comes apart.

This is the striker, and you notice that the striker is round and has a tip on the end here.

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Of course, we need an X-ray to see through your finger.

A I am sorry.

This is the latch. I will try not to -- when you close the door, the latch pushes in, and notice how it grabs. The latch comes down and grabs, will grab the striker.

If I go like that, it's completely encapsulating the striker in that if I pull the hinge apart, this won't come apart. There is no way this will come apart without tearing the metal.

THE COURT: You mean it clasps it in a circle, as it were?

THE WITNESS: Yes, you can see how the latch now -- this is the latch -- completely encloses the striker. There is no way that striker can come out without the metal being torn. You can pull the whole hinge off and this will stay together.

MR. WALKUP: I believe the clerk has marked that for identification. I offer it in evidence for illustrative purposes, and in line with the Court's statement on it.

MR. REARDON: I have stated my objection on this exhibit, your Honor.

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THE COURT: I think I made it clear several times it's being received for the very limited purpose of enabling the jury to follow the witness' testimony better than would be the case if it were simply oral testimony.

(Plaintiffs' Exhibit 76 for identification was received in evidence.)

Q Based on your knowledge, experience in the field, would you tell us how many years prior to 1966 this particular type of anti-burst or safety lock was in common usage and in the state of the art in the United States vehicles?

MR. REARDON: I object, your Honor, and if your Honor will permit me, I would like to ask a question or two.

VOIR DIRE EXAMINATION

BY MR. REARDON:

Q I take it that whatever you know about the state of the art of locking mechanisms on motor vehicles, in terms of specific details, you acquired after you made your examination of this particular lock mechanism on September 25, 1970, at York, Pennsylvania; is that correct?

A Not all of what I said. I mean I was aware at that time of the tests at Cornell where they showed that certain types of models --

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Q Sir, please.

A You are asking me what I knew.

Q No, I am asking you whether or not the specific details of what you are testifying about now in terms of the state of the art --

A Of these types of locks?

Q Yes -- was something you acquired after you were retained in this case.

A No, sir. I knew this before I inspected it.

Q You knew that before? Do you know whether this device was used on any kind of a truck as distinguished from a passenger vehicle?

MR. WALKUP: That is a pretty broad question, and I think counsel may have asked more than he intended to, and kind of a truck.

Q Up to the date this one was manufactured.

A Well, there were -- I am not sure. I believe they were used on the light pick-up trucks that double as passenger cars.

Q But you are not sure?

A I am not sure, no, sir.

Q So in terms of your testimony today, that kind of a device shown on the exhibit just received, you cannot testify affirmatively that it was used on trucks up to that

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time? We are talking about 1967.

A Not trucks.

Q Heavy trucks?

A Certainly not heavy trucks. I don't know about heavy trucks.

MR. REARDON: I object, your Honor.

THE COURT: What are you objecting to? I don't follow.

MR. REARDON: I am objecting to the last question, which was a question of utilization of this locking mechanism for a period of time prior to 1966, I believe counsel's question was.

THE COURT: I will sustain the objection, but I will allow further inquiry.

MR. WALKUP: You can't prove everything by one witness. We will have other expert testimony.

THE COURT: I will sustain the objection.

MR. WALKUP: All right.

Q Do you have an opinion, based on your knowledge, experience, and training, as to whether or not, had the right front door of the vehicle in which Mr. Lane was riding had a safety or anti-burst type of locking mechanism, as you have described it --

A No, sir, it did not.

Q I haven't finished my question.

A I am sorry.

Q Let me withdraw it and start over. The lawyers are long winded traditionally, and I will try to be sure, but let me finish.

Do you have an opinion as to whether, if the truck in which Mr. Lane was riding at the time of the accident under the facts described in the hypothetical question yesterday had had an anti-burst or safety type of latch instead of the type which it did, the right front door would have opened at the time and in the manner which I described in the hypothetical question that it did, and that is, at a time when the truck was starting to lean, and it leaned about 20 degrees and a loud popping noise was heard, and the door came open, and as you have told us, came up until it hit the ground.

MR. REARDON: Objection, your Honor.

THE COURT: Overruled.

A Yes, sir, I do have an opinion.

Q Will you tell the Court and jury what your opinion is based on your knowledge, experience, and training on that subject?

A Well, the damage to the truck as evidenced in my inspection and the photographs was relatively minor.

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There was a lot of little sheet-metal damage, and it may have been costly to repair, and if it was on your car you would be quite upset about it, but for purposes of retaining the door, there was really no major damage that would have rendered metal tearing of the door open which would be required if it had a safety door lock; so it's my opinion that with this type of door lock, or any door lock that would completely encapsulate the striker plate, the door would not have come open as described.

Q With reference to completely encapsulating the striker plate, is there any engineering significance as to the geographical difference between the striker type of plate that you have shown us up at the top of the door and another one down at this part of the door, as distinguished from one which is right around the latch mechanism itself?

MR. REARDON: Objection, your Honor.

A Yes, the big difference is, no matter what happens to the rest of the door frame --

MR. REARDON: Sorry, I objected, your Honor.

THE COURT: Overruled.

A No matter what happened to the rest of the door frame in this type of latch, it remains together. Any distortion, as you saw in the other model, of the

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door or latch just will open it very readily.

MR. WALKUP: All right, thank you, sir.

THE COURT: Mr. Reardon?

MR. REARDON: Yes, your Honor.

CROSS EXAMINATION

BY MR. REARDON:

Q Mr. Ehrlich, did you bring with you any particular file?

A Yes.

Q Relevant to your investigation in this case?

A Yes, sir, I did.

Q Do you have that with you at the witness stand?

A Yes, sir, I do.

Q Would you be so kind as to let me see it, please?

A This other does not pertain to the case.

(Witness hands folder to Mr. Reardon.)

MR. REARDON: May I look through this, your Honor?

Q May I look at it during the luncheon recess and to save some time?

A It's all right with me.

Q I take it, sir, that you have never had the opportunity during the course of your professional career to do any designing of door latches for automobiles or trucks?

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A That's correct, yes, sir.

Q I think you told us yesterday that up until the time you were retained some time around September of 1970 by Mr. Hirschhorn, you had never had the opportunity to examine a striker and latch mechanism like this one here?

A I was aware of how they worked in general. I had not examined one in detail, taken it apart or anything like that.

Q You didn't examine one as a professional experience?

A I examined them visually, not disassembly or anything like that.

Q Did you do it for a client or --

A No, just curiosity. Being in automotives for 20 years, I like to know how different things work.

A Did you ever, sir, as a professional matter, prior to this time undertake to look at a striker and latch mechanism on a truck that had been in any kind of an accident?

A When you call professionally, you mean as paid to do this? Is that what you mean?

Q Let's start with paid, yes, sir.

A No, no, sir, just by curiosity, observing different designs in striker plates and latches and how they

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worked.

Q But not in connection with an accident?

A No, sir, not in connection with an accident.

Q Either paid or unpaid?

A Either paid or unpaid.

Q So that this was the first time that you had ever undertaken to do this professionally, back in September of 1970?

A Yes, sir.

Q Do you have a curriculum vitae within your file here? I think counsel had it.

A Counsel has it, yes, sir.

Q You said you had written a good number of papers, 30 or 40, I think you said; is that right?

A I do not know the number. Most of them are listed there. There's been some published since that was written up.

Q Anything relevant to -- I guess I shouldn't say relevant -- anything dealing with doors and latches?

A No, sir.

Q Striker plates?

A No, sir.

Q Damage to vehicles in rollover situations, striker plates and latches?

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A I have done work with crashes and vehicles' action in crashes.

Q Relevant to latches, doors?

A No, sir.

Q So this was sort of a new professional experience, at least as a consulting engineer at Stevens Institute, when you were engaged to undertake this assignment; isn't that so?

A I wouldn't define it as such, no, sir.

Q You wouldn't define it that way?

A No, not as a new experience. I have inspected many vehicles for many different things.

Q Maybe I didn't state that precisely.

A If you limit it to striker plates and door latches, yes, you are right.

Q Did you, at any time after you saw the truck in this case back in September of 1970 -- and that is the only time you saw it, right?

A Yes.

Q Did you ever have the opportunity in connection with this case to look at another similar truck, a 7500 series truck?

A No, sir. I have looked at other trucks, but I don't know if I have seen a 7500. I have seen many

vehicle, and I don't know.

Q Let me put it another way: Did you, as part of getting ready to provide an opinion in this case, go and look at an undamaged 7500 GM series truck?

A No, sir, except I looked at the other side of the truck which was not damaged.

Q All right.

A The same truck.

Q In order to undertake this engagement, did you speak directly with counsel?

A With Mr. Hirschhorn, yes, sir.

Q Did you correspond, he to you, in order to set up your engagement?

A Yes, sir.

Q Do you have in this file a copy of his letter to you?

A There is correspondence. I don't know whether he wrote -- I think he called me on the phone and asked if I would participate, and I went out. I see you have my report, and there's been correspondence subsequent thereto.

Q In any event, is this document which I show you now the first communication that you wrote in connection with your engagement here?

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A I will have to check my file. I believe it is. If there is a pre-dated letter, maybe so.

Q Let's proceed on the assumption it is, again to save time, and if you --

A I don't remember one.

MR.WALKUP: You are referring to the letter of September 29, 1970?

MR. REARDON: Yes. Is that the first one? Maybe Mr. Hirschhorn can help us.

THE WITNESS: I do not remember an earlier one. You have the file.

MR. REARDON: Can we mark that for identification, your Honor?

MR.WALKUP: I have no objection to it going into evidence, if you like.

MR. REARDON: Maybe later.

(Defendant GM Exhibit A-100 was marked for identification.)

Q In any event, it was pursuant to Mr. Hirschhorn's request that you went out to Pitman's York, Pennsylvania yard to look at the truck that day?

A Yes, sir.

Q I am just putting this here to refresh your recollection if at any time it needs to be refreshed.

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Is it fair to say that the purpose of your going out there on that occasion was to make measurements to allow you to calculate the stability characteristics of the vehicle?

A He asked me to examine the vehicle and --

Q Sir, if you can answer my questions yes or no --

A Would you -- is that the only thing he asked me to do or not?

Q My question is, is it fair to say that you were sent out there, or you went out there to make measurements to allow you to calculate the stability characteristics of the vehicle?

A Along with other things, that's correct.

Q And by stability characteristics, what did you understand that to mean?

A Well, from counsel's indication, he told me that the driver --

MR. SCHWAB: Objection.

THE COURT: Sustained.

THE WITNESS: He is objecting to my answer or to the question?

MR. REARDON: He is objecting to the question.

THE COURT: To the statement.

MR. REARDON: I am trying to formulate another one.

THE COURT: I sustained the objection to the answer, what counsel told him.

MR. REARDON: Let me try and eliminate that, your Honor.

THE COURT: You put the question. I will allow him to answer the question.

T3 Q Stability, sir, in terms of motor vehicles, means what?

A Well, there is --

Q In engineering parlance, I mean.

A There is something called dynamic stability and there is something called statis stability. Static stability is just whether it will fall oer or not, how readily it will fall over. Any object, like this box (indicating), has static stability. Then it gets to a certain point where it falls over and it is no longer stable.

Dynamic stability regarding a vehicle in motion is whether, given a disturbance, and you always have disturbances, the vehicle will stay along a straight path or will it diverge or get out of control. There are types of stability for vehicles.

Q In any event, it means either moving or standing still, the ability of the vehicle to stand up.

A To remain upright and go in a straight line.

Q Do you recall that you were in fact, when you went out there to look at it, allowed to make a thorough visual examination of the vehicle?

A Well, I was quite limited as to how much I could do. I was not allowed to make a thorough examination.

Q A thorough visual.

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A Visual, yes.

Q Maybe I am not speaking clearly, but I am going to try to be very precise.

A Thedefinition of thorough and visual are contradictory. That's why I --

Q Well, do you recall, sir, that in your communication to counsel you stated in words or substance that, "I was allowed visually to inspect the vehicle thoroughly."? Do you recall whether you said that or not?

A All right. Yes, sir, that's what I said.

Q You did, didn't you?

A Yes, sir.

Q And that was correct, wasn't it?

A Yes,sir.

Q And am I correct that the only apparent damage that you saw was due to sheet metal on the right side, especially at the forward cab, where the door was severely damaged? Is that correct?

A I think that's right, yes, sir.

Q And am I correct that you also recorded any place else relatively minor sheet metal damage?

A Yes, sir. I took pictures of most of the damage.

Q Now, did you ever see this truck again after that first occasion on September 25, 1970?

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A No, sir. I just saw the door.

Q And I take it at some time after you saw the truck you got to the door and you cut out the latch mechanism you've told us about.

A Yes, sir.

Q I asked you yesterday whether you remembered when you got the door, and you said about a month or two after your inspection in September of '70. Do you remember that?

A Yes, sir. I don't remember the exact date. I think it was like a month or two.

Q After you did get the door and you took it out, I take it you made a more elaborate examination than you had out at York,Pennsylvania.

A Yes, sir.

Q And that involved a detailed examination of the latch mechanism and the striker plate which are up there before you, is that right?

A Yes. I think you have it.

Q And after you made this examination, did there come a time when you provided to counsel who had engaged you, Mr. Hirschhorn, any kind of a written report or opinion of what your findings were?

A Not written, no, sir.

Q Did you ever provide any written report or opinion to him about this action?

A Not subsequent to this (indicating). On that, no, sir.

Q Did you do it on anything?

A I don't remember giving him any other written report. I had written communications with him, but mainly it was sending him photographs or answering questions that he asked, and it is in the file. I don't remember. No report on the latch, no, sir.

Q Any report on anything other than the latch? By report I mean opinion, professional advice about what caused this accident.

A I don't remember.

Q Have you had occasion to review your file before you testified here?

A Yes, sir, and I don't believe there is any. I really don't believe there is. There might be something that I don't remember, though.

Q All right. We'll look at it. Whatever is there is there.

A You are welcome to it.

Q In any event, as a competent engineer, before you arrived at your professional opinion you would have taken

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this latch out and made an examination of the way in which it works, wouldn't you?

A Yes, sir.

Q And you would have examined the various parts of the rotor and the striker, right?

A Yes.

Q So that whatever you did in the way of reaching a professional judgment or conclusion relating to the happening of this accident you did after you got that door in your possession and cut out the various mechanics.

A No, sir. You see, my comment in my report indicates that this had the --

Q Sir, I don't want you to testify from something that isn't in evidence, and that document is not. If you can answer my question, I wish you would.

A Well, I believe I am. You asked me if --

MR. REARDON: Your Honor, may I ask that the witness not refer to some document?

THE COURT: Well, if he can answer without the need to refresh his recollection, he should.

THE WITNESS: In general, in my report, when I first inspected the vehicle, I indicated to Mr. Hirschhorn immediately that this vehicle had the old style door latch, which had been superseded many years previously.

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Q Okay. All I'm trying to establish, sir, is that on that occasion you did not reach your ultimate professional judgments and you awaited, I take it, the receipt of the latch and striker before you did.

A No. I told Mr. Hirchhorn to get ahold of the latch and striker, we might need it later. I examined it, but my judgment was not changed. That's why there is no report.

THE COURT: Mr. Reardon, I am going to suggest that we take our luncheon recess now. You'll want a few extra minutes anyway to look at those papers. We will resume at 2 o'clock.

(Luncheon recess.)

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AFTERNOON SESSION

2:00 p.m.

THE COURT: All right, proceed.

I. R O B E R T E H R L I C H, resumed.

CROSS EXAMINATION CONTINUED

BY MR. REARDON:

MR. REARDON: Could I have your Honor's permission to ask the witness to come over by the jury to demonstrate the striker and latch mechanism a little more closely for us?

THE COURT: Yes, yes.

MR.WALKUP: Your Honor, may I have permission to stand over here somewhere where I can see?

THE COURT: You all have permission to stand wherever you will be more comfortable and see whatever is going on.

Q I am holding in my right hand Plaintiffs' 74, which is the latch mechanism that is inside the door with the exception of this cover, if you call it the cover -- I call it the shroud -- and the rotor, which is this piece here, in the interior; is that correct, sir?

A Yes, sir.

Q On my left hand I have the striker plate with

what you call the tongue showing on it; is that right?

A Yes.

Q That is mounted in the post, and just so that I oriented these things as they would appear on the right door of this vehicle, on the day of this accident, I would have the front of the truck where his Honor is standing nearest to Juror No. 1, and the rear of the truck would be toward the back of the courtroom. Is that correct?

A Yes.

Q Am I correct that the rotor mechanism, which is Plaintiffs' Exhibit 74, would travel with the door, and in the course of opening and closing the door, the rotor and the tongue of the striker would come in contact?

A Yes.

Q If you were outside the vehicle and wanted to get into the vehicle, you would press the handle on the door as you would on a car or truck door, and that would actuate this arm which again is interior, you can't see that, can you?

A That's right.

Q And some mechanism would press upon this protrusion in Plaintiffs' Exhibit 74, and that would serve the purpose of rotating the rotor; is that right?

A Well, it rotates some linkage with a spring that would rotate the rotor.

Q Could you demonstrate that to the jury? I don't know if everybody can see that, but actuate that so the rotor moves.

(Witness demonstrated.)

Q When the rotor moves in that direction, as you said, that causes some movement again in the rear of Plaintiffs' 74?

A That's correct.

Q Would you take Plaintiffs' 74 and show the jury the position of the rotor with the door after it has been actuated and opened? In other words, somebody has pressed on the handle, the door has been pulled out, and opened away from the striker plate?

A I have a picture of the open door. This is the way the door is.

THE COURT: Try to raise your voice, please.

A This is the way the door is when it's open. This, of course, is the other door. This is the left door. We are talking about the right door.

Q You are talking about the Plaintiffs' Exhibit 80-K in evidence?

A The tongue is sticking up, or rather the rotor

is protruding like this here right here, and is sitting like this. When it is opened, it will be like this.

Q In other words, that is the open position of the rotor?

A That's correct.

Q If somebody has come up, pressed his finger on the button, pulled his finger away from the striker, the rotor is found in that position?

A That's correct.

Q That exhibit that you have in your hand, Plaintiffs' Exhibit 74, right?

A That's correct.

THE COURT: Shall we go back to our seats yet?

MR. REARDON: Your Honor, this is sort of elaborate. It may fall flat on its face. I hate to have you standing, but let me give it a try.

Q Now I am going to change the position of the rotor and ask you to take a look at the interior of this mechanism. Is that the position that the interior of that mechanism is in when the latch has been opened from the outside and taken away from the striker?

A I believe so.

Q Let me show you this photograph which was previously marked at the deposition of Mr. Severey, an expert for

the plaintiffs, and ask you if that shows the interior in that position.

A It appears to.

MR. REARDON: I offer it in evidence.

MR. WALKUP: No objection. It's a little larger than it was at his deposition.

MR. REARDON: Yes.

(Defendant General Motors Exhibit A-88 for identification was received in evidence.)

Q Will you take, and with this black pencil write on the back, "Interor" or how would you describe this?

A This I would call the front face and this the rear face.

Q All right, "rear face of latch in open position."

(The witness wrote on the exhibit.)

MR. REARDON: May I show this to the jury, please, your Honor?

THE COURT: It's in evidence, yes.

Q There are two basic parts that are moved on this inner portion of the latch, are there not, sir, these two silver pieces; is that right?

A That's correct.

Q Down the center. And this button or flat surface is what you indicated before somebody, if they wanted to

open the door, would have pressed that to put that --

A Not that button but some other --

Q Some other button outside presses that?

A Presses this.

Q And puts this mechanism in what is the open position, right?

A That's correct.

Q On the other side they would have put the rotor in the open position as you have here?

A That's correct.

MR. REARDON: I am trying to get a photographer in here, your Honor, so we can take a picture of it in the open position, but I will proceed, and I would just want the jury to note the position of the rotor as it's open.

JUROR NO. 3: Is that what they call actuate or activate? You mentioned the word actuate. Is actuate or activate?

THE COURT: Activate is what you probably meant.

Q That is the mechanism in the inner surface in an open position, and this, as we show it here on 74, is the rotor in the open position?

A That's correct.

Q Would you show the jury the position of the rotor

in the closed position and the closed position you have drawn on Plaintiffs' Exhibit 99 on the blackboard, to the right of the blackboard, right?

THE COURT: You mean the locked or closed position?

MR. REARDON: I mean locked, I am sorry.

Q You have indicated locked?

A Yes.

Q Am I correct that that is what you drew on that blackboard?

A Yes.

Q To the right.

(Witness demonstrated.)

Q That has more or less moved the rotor over, talking in terms of the two most upper extremities, sort of on a plane, hasn't it?

A Yes.

Q Is that not so that you have drawn that in precisely -- as near as one can do -- that fashion under the locked position in the Plaintiffs' Exhibit 99 to the right of the blackboard?

A Essentially, yes.

Q That was the intent when you drew it?

A Yes. I am a poor artist.

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Q I think you did pretty well, as a matter of fact.

Looking again at the interior surface, is that not the way the interior of the latch mechanism looks when the door has been closed and locked?

A I am including the locking mechanism on the door.

Q Excluding the mechanism, the locking mechanism inside.

A The extra lock.

Q There is an extra lock on this door, isn't there?

A That's right.

Q I don't think you can see that on this door because it's the wrong way, but I am correct, am I not, that this handle which I have my hand on now (indicating), is the handle that opens the door to the right front door of this truck?

A From the inside, yes.

Q From the inside, and in order to put on this extra lock that you just told the jury about, youwould move this handle in one direction or another after you slammed the door, right?

A You could, yes, sir.

Q In other words, after it gets in this locked position right here to the right of the blackboard, in order

to put this additional lock on that handle, you would push it, and I don't know which way at the moment, but it is one way or another?

A I believe it's that way.

Q Forward, so you would be pushing it forward, away from the man in the seat, right?

A I am not sure. I believe so.

Q One way or the other?

A One way or the other.

THE COURT: Mr. Reardon, if I may interrupt, is the marshal here?

THE CLERK: Yes, sir, your Honor.

THE COURT: A request has been made to take photographs, and I have given permission to do so.

Off the record.

(Discussion off the record.)

Q Mr. Ehrlich, am I not correct that this other locking device that the door does provide is activated by this mechanism protruding in this direction from this device? Is that right?

A You only lock it when you push the other locking mechanism. It moves this up to here, so that you cannot push this.

Q In other words, you can lock this door?

A It's double locked.

Q Double locked.

In other words, it's difrerent than the button, but there is nonetheless a lock on it?

A Yes.

Q So thatwhen somebody from the outside presses, it's locked?

A That's correct.

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T2 Q Let me show you this photograph of this device and ask you if it fairly represents the interior of that mechanism in what has been described by you as the locked position, without the double lock on it.

A Yes, sir.

Q It does?

A Yes.

MR. REARDON: I offer it in evidence.

MR. WALKUP: Are these all from Professor Severey's deposition?

MR. REARDON: This one was not. This one was taken by General Motors when you provided us with the lock and striker plate.

(Defendant General Motors Exhibit A85 received in evidence.)

x Q And this photograph shows that tooth, or whatever, locked right in there just the way it is shown --

A That's correct.

Q -- on Plaintiffs' Exhibit 74, correct, sir?

A Yes.

Q And the rotor is in the locked position as described by you.

A Yes, sir.

Q Now tell me, sir, when you created the model,

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which is Plaintiffs' Exhibit 78, which we all agree is a rough idea, let's call it, of the way this operates -- is that right?

A That is an illustrative example.

Q Illustrative, correct.

-- tha when you prepared the striker, which is this little portion I'm pointing to now on the edge of the door, interior of the cuff, you tried to make that, to be fair to everybody, pretty much with the same kind of depression, you notice, and angle that you would find in the actual rotor when the door was locked, is that right?

A That's right.

Q In other words, you got the same kind of hill going down, depth, and hill going up.

A Yes, sir.

Q And the purpose of that was, to be fair to General Motors or whomever, to portray it as nearly as possible as it is.

A That was my intention.

Q Now again, if I can show this to the jury, if I press the button, it goes from this locked position into the open position.

A That's correct.

Q And then you can open the door.

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A That's correct.

Q Now, sir, let me show you this. Do you see the position I've placed that rotor in?

A Yes.

Q What position is that?

A It looks like you've jammed this here and jammed it halfway.

Q Jammed it?

A If I move this locking mechanism, it releases.

Q It didn't release when you removed it, did it? Please let the jury see what you are doing.

A When I move this, something moves.

Q Well, let me do this, or let me ask you to do it for the jury. Take your hand and actuate this mechanism just as though somebody were pressing a handle outside the door, trying to open the door of this vehicle. Let me ask you to do that. But first let me ask you something else.

Am I correct that the rotor, rather than being in that position (indicating) -- is that correct -- has now moved into a new position? Is that not correct?

A It appears to.

Q And it has moved into a position so that the rotor when coming in contact with the striker would be

higher toward the interior of the cab, or the truck, than it was the way you had it, isn't that so? Am I not correct?

I don't want you to guess. This is the position of the rotor as described by you in the locked position.

A That's correct.

Q And as drawn up there.

A That's correct.

Q And in that position you told the jury that when the door was locked, the striker would rest in that little gully between the two tips of the rotor, is that correct?

A That's the way it is designed.

Q You didn't design this, did you?

A No. But that's the way it is designed. Ordinarily it would.

Q Ordinarily it would. Okay.

And you say that is the locked position.

A Yes, sir.

Q All right. Did you ever see one in any other position than this?

A When they are closed like that, you can't see very much.

Q All right. That's a fair statement.

Now, my question, sir, is, I have taken that rotor

and moved it into that position (indicating). Do you see that?

A Yes.

Q Now, when I have done that, I have in effect moved one-half of the rotor inboard and upward toward the cab, is that correct?

A Yes, that's correct.

Q So that assuming for a moment that this were the locked position, assume that, you would in effect be creating a different configuration than the one which you drew up there, isn't that so?

A That's correct.

Q Well, now, now I am going to show you the back again. We have one exhibit, which is General Motors A88, which you said was the open position, we have General Motors A85 which you said is the locked position. Now, did you, or to your knowledge did anybody else for the plaintiff, take a photograph of this part, Plaintiffs' 74, in the position I'm showing it to you now.

A No, sir.

Q Well, now, do you know, sir, whether or not the position I'm showing it to you now is the locked position or the open position or the secondary position?

A I don't know what you define as the secondary

position.

MR. REARDON: Your Honor, could I have the photographer take some pictures now so that we don't lose some of this?

THE COURT:He is not going to do it here, is he?

MR. REARDON: Yes. I thought he would do it right here.

THE COURT: Let him go in the room next door.

MR. REARDON: I wanted him to take it after the witness described this.

THE COURT: Give him whatever you want. There is a room right next door.

MR. REARDON: He is going to have to come back and forth.

THE COURT: That's all right.

Q As I'm showing it to you now, it is what you say is the locked position?

A That's correct.

MR. REARDON: I would like to have the locked position stated by this witness photographed.

THE COURT: All right.

(Pause)

MR. REARDON: I would be happy to have anybody who wants to accompany him.

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MR. WALKUP: I might just suggest, your Honor, we have all seen it. I think we can all remember what the witness has said. And couldn't he then take him, instead of running back and forth, and do it during the recess?

MR. REARDON: Your Honor, this is crucial.

THE COURT: That is perfectly all right.

MR. REARDON: Thank you.

Maybe we can continue with something, your Honor.

THE COURT: It would be helpful if you do.

BY MR. REARDON:

Q Let me show you this photograph, Mr. Ehrlich, and ask you if that reflects this position that I just described to you, this third position.

A Yes, sir, it does.

MR. REARDON: I offer it in evidence.

MR. WALKUP: That's one of General Motors?

MR. REARDON: It is.

(Defendant General Motors Exhibit A89 received in evidence.)

xx

Q While we are at it, Professor Ehrlich, would you be so kind as to write on the back of A85 that this is the way the back looks as you have it in the locked position.

MR. WALKUP: Is that the last one?

MR. REARDON: Make it rear face of right door,

latch in locked position.

A (Marking)

Q Would you put your initials next to both of these, please.

A Yes (marking).

Q Did you ever see a photograph in which the mechanism at the back of the rotor was in the configuration it appears in in General Motors A89 in evidence?

A I saw a number of photographs of the back plate and I'm not sure of which ones I saw. I am not certain.

Q Where did you see them?

A In Mr. Severey's deposition.

Q Was that provided to you at some point?

A Yes, sir.

Q Did you study it?

A I didn't have it very long. I just glanced at the photographs.

Q You are talking about these various photographs in this deposition that I have before you now?

A That's correct.

Q Well, maybe at the recess you could look at it and answer the question whether or not in that deposition is a photograph of this mechanism in the position it appears in this exhibit, General Motors A89.

A Okay.

Q Have you ever moved, while this latch has been in your possession, this machanism into the position it appears in in A89?

A I do not know.

Q Well, how long have you had the latch? Other than giving it to us, have you had it all the time?

A No, sir.

Q So you gave it to Professor Severey, did you?

A I gave it to Mr. Hirschhorn, who transmitted it to Professor Severey.

Q But other than the times it was with General Motors, perhaps, or Professor Severey, you had it over at Stevens?

A In the two years I've had it maybe a month, maybe a month and a half.

Q I see.

A It was more than two years: since '71 to '74. About three years.

Q Now, to save a little time, you know the position that the rotor was in when I put the latch in the configuration the back of it shows in A89, don't you?

A Yes, sir.

Q And would you be so kind as to stand there and I'll ask you what you've drawn?

I ask you if I'm not correct that in that configuration there has been movement of the rotor; is that right?

A That's correct.

THE COURT: Excuse me. There will be some interruption on account of official business, so you may go into the jury room. I don't know how long we will be.

(Recess.)

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1 pm

(In open court, jury present.)

THE COURT: Sorry for the interruption. Go ahead. Were your pictures taken in the meantime?

MR. REARDON: WE are having a little technical difficulty, your Honor. It's not as easy as it looks. We have one, and I have two more coming, and they should be here in a couple of seconds, I hope. These are really Polaroid, so they are developing right as we do it. I will move along a little bit until I get those, and then I will come back.

CROSS EXAMINATION CONTINUED

BY MR. REARDON:

Q Do you recall this morning with the jury in the court you made this notation of a quarter of an inch on the blackboard in what you called the locked position? Do you remember that?

A Yes, sir.

Q And the purpose of yourdoing this was to tell the jury, am I correct, that the extent to which, as I remember your saying it, the tongue of the striker came in contact with the rotor was this quarter of an inch distance? Remember that?

A There was that much interference, yes, sir.

Q That much interference. Am I correct that in

that last position that I showed you, the back of the locking mechanism and the rotor in --

A Yes, sir.

Q -- that there would have been a change in the rotor's position in relation to the tongue?

A Yes, sir.

Q Am I not correct that that change would have changed this quarter inch dimension that you have drawn here?

A Yes, sir.

Q I am going to ask you this question, sir: I am asking you whether you are in a position today under oath to tell this jury that what you have drawn here you know to be the locked position of that striker and rotary mechanism on this particular truck, whether you know it?

A It's what I call a locked position.

Q Now what do you mean?

A I don't know what you are defining as the locked position. You have a secondary position too.

Q You called it a locked position.

A Yes.

Q I didn't.

A No, I am calling it a locked position.

Q Do you know whether that is the locked position

as this mechanism is designed to operate on that vehicle?

A No, sir.

Q Do you know?

A No, sir, I do not.

Q So that when you told the jury that this was the locked position, you didn't know whether it was designed to look like that by the manufacturer or not; isn't that so?

A That's one of the locked positions that it's designed to set in. I don't quite understand your question.

Q This is one of the locked positions? Where did you learn that this is one of the locked positions?

A That is a locked position. I don't quite understand what you are driving at, so I don't understand the question.

Q Sir, I am driving at something that you are driving me to.

A Well, I don't understand.

Q When you say this is one of the locked positions, I want to know where you get that from, that is all. Where do you get it from?

A That's the position which will hold the door shut.

Q Locked?

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A Is that what you mean?

Q Locked.

A I call it locked.

Q Let's find out what you call locked. What do you call locked?

A With the door shut, the door shut.

Q Shut and slammed shut, right, without the actuation of the interior handle into that supplemental lock? Is that what you mean?

A It's shut. I don't know what you mean by slammed shut.

Q When you step in your car door, Mr. Ehrlich, and you are going to take your family for a drive, you slam the doors?

A That's correct.

Q Is that what you call that?

A I think I see what you mean.

There is probably two positions that you are saying, and that is one of the two positions.

Q No, Mr. Ehrlich.

A I understand what you mean.

Q Please answer my question.

A I am trying to answer your question.

Q When you step in your car with your family and turn

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that key and back out of the driveway, do you call this the locked position?

A I believe I see what you mean. There very often is a way -- a catch but not fully closed. Is that what you mean?

Q No, sir.

A Then I don't understand.

THE COURT: May I try and clarify this?

MR. REARDON: Yes.

THE COURT: When you speak of the locked position that is shown in that exhibit by the word locked are you intending to mean that the door is securely held so it cannot be opened without some other movement? Is that what you have in mind?

MR. REARDON: Yes, sir.

THE WITNESS: Yes, sir.

Q Is that what you mean?

A That's what I mean.

THE COURT: That is a simple question.

Q I think I asked you this, but I am going to ask you again, do you know that this is the way it was manufactured when the door was closed in a locked position as it was intended to be by the manufacturer without somebody opening it? Do you know that?

THE COURT: I am going to suggest that that is a rather involved question. Would you like the reporter to read it to you?

MR. REARDON: No, your Honor.

THE COURT: Start all over, please.

Q Let me start with this quarter of an inch again. All right?

A Yes, sir.

Q When you drew that for the jury this morning, you intended to demonstrate that this is the way this mechanism looked when the door was locked?

A That was my belief, yes, sir.

Q That was your belief?

A You can't see it when it's locked, so I believe it's that way.

Q You are an expert, sir. You are not suggesting that I only believed it to be this way? Aren't you testifying as to what you know in terms of the mechanism?

A I know it -- I am not sure what you mean by your question, but I know this will hold the door shut. Is that what you mean?

Q No, sir. I mean will this hold the door shut and make you happy when you back out of the driveway with your family in the car?

A I don't know that, whether it would make me happy or not.

Q Did you ever hear of a position called the secondary position in all your research on latches that you have done in anticipation of testifying here?

A There are two positions. I don't know which is termed the secondary and which is termed the primary. There are two positions in shutting a door, that's correct.

Q There are three; is that correct?

A Well, there is open.

Q There is a primary, a secondary, and an open.

A And then, as I -- what you might call fully locked, where you have actually engaged another lock, you know.

Q Let's forget the other lock. Let's not confuse things with the other lock. You have drawn two positions, locked and open.

A That's correct.

Q Now you are telling us there is another position, right?

A Well, when the like the button is pushed or the handle is turned up again.

Q I am asking you to forget about the pushing of the button and the movement of the handle.

A Yes.

Q I am talking about slamming that door shut.

A That's correct.

MR. WALKUP: Could we establish what kind of car door he has?

Q This kind of truck door. Assume that would be your car, all right?

A All right.

Q Your testimony is this is the way it looks when you slam that door, and it's fully locked? Is that your testimony under oath before this jury?

A Well, you called to my attention there can be a different position. Is that what you mean?

Q That is what I mean.

A Yes, okay, there could be another position.

Q There could be another position?

A The door could --

Q And that other position is a position in which the rotor has moved to further engage itself with the tongue of the striker?

A That's correct.

Q Isn't that right?

A That's correct.

Q When you took all of these photographs and went through all this investigation, did you ever at any time

suggest to anybody, orally or in writing to this jury or anybody in the world, that there was another position?

A No, sir.

THE COURT: Where is Mr. Schwab?

MR. SCHWAB: I am back here, your Honor.

THE COURT: You are hiding your light under a bushel there.

MR. WALKUP: I may go back there. You know, you have asked certain people to raise their voice.

THE COURT: I didn't see him at all.

MR. WALKUP: I wonder if we could lower the voice just a little bit.

THE COURT: Well, for a little change it's good to hear a loud voice.

MR. REARDON: That is a rare accusation against me, believe me.

MR. WALKUP: I am going back to Mr. Schwab.

MR. SCHWAB: It was actually so as not to block anybody's view.

THE COURT: I didn't see you. I didn't know you were so small.

MR. REARDON: Your Honor, I have these Polaroids. They are really the best we can do under the circumstances.

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Q I am showing you Plaintiffs' Exhibit 74 again with the rotor in that horizontal position.

A Yes, sir.

Q That you described and drew on the blackboard as the locked position, right, sir?

A Correct.

Q Let me show you this Polaroid, sir, and ask you if that shows the rotor in that position.

A Yes, sir.

MR. REARDON: I offer it in evidence.

MR. WALKUP: If you say that is what it shows.

MR. REARDON: No, I don't say it. The camera does.

MR. WALKUP: I am accepting you to save the time of my looking at it.

(Defendant GM Exhibit A-101 for identification was received in evidence.)

Q I have activated the rotor into the open position on Plaintiffs' Exhibit 74, have I not?

A Yes.

Q Let me show you this photograph and ask you if that fairly shows the rotor in the open position.

A Yes.

MR. REARDON: I offer it in evidence.

MR. SCHWAB: Your Honor, I assume all these photographs by General Motors are going into evidence against the plaintiff only.

THE COURT: Right.

(Defendant GM Exhibit A-102 for identification was received in evidence.)

Q I show you another photograph, sir, and ask you whether that photograph fairly represents the rotor in the third position that I introduced you to during the course of your examination.

A Yes, sir.

MR. REARDON: I offer it in evidence.

(Defendant GM Exhibit A-103 for identification was received in evidence.)

Q Now, Professor, what I would like you to do, if you would be so kind, is to take the three Polaroid photographs that I have just offered in evidence, and have you take them and staple the appropriate one to the large photographs so that the jury in one sighting can see both the front and the back.

A May I have the latch?

Q Yes, sir.

A This matches with this one.

Q What position is that, sir?

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A That's the horizontal position.

Q Of the rotor, or what position?

A Of the rotor. I beg your pardon?

Q The horizontal position of the rotor, all right. In other words, that is what you call the locked position?

A Yes, sir.

THE COURT: Wouldn't it be a good idea to put a circle around the rotor, jut to show it? Do it on the big picture.

MR. REARDON: The rotor doesn't show. The large ones are the back side. Make it big enough so that --

(The witness marked the photograph.)

Q Would you do the same with the next?

MR. REARDON: For the record, the witness has matched up General Motors A-101 and General Motors A-85.

Q Would you circle the rotor on that too, please, sir?

(Witness marked exhibit.)

MR. REARDON: The witness has now matched up A-102 with A-88. Finally, we have A-103 and A-89.

Q This last pair, A-89 and A-103, that is the position of that mechanism front and back?

A That's correct.

Q As demonstrated by me to you during the course of your cross examination?

A That's correct, yes, sir.

Q For want of a better designation, could you put the Reardon positionon that?

A What do you call it?

Q The Reardon position.

Q You do acknowledge that this rotor, as reflected on A-89 and A-103, the Reardon position, is a position that you did not describe to the jury at all this morning?

A Yes, sir, that is correct.

Q And is in no way reflected in any of your reports to Mr. Hirschhorn in any respect?

A I didn't give any reports on different positions. I reported on how it could engage or come apart without unlocking.

Q When you gave that report, you never reported on this position?

A That's correct, no, sir.

Q In thinking about your testimony a little bit, are you prepared to concede that what I have shown you in the Reardon position is in fact the locked position?

A Yes, sir, I am.

MR. REARDON: May I show these to the jury, your Honor? The first one that is coming by, if I may describe them for the jury, is the Reardon position.

The next two are first, the open position, and then what Mr. Ehrlich called the locked position.

(Exhibits handed to the jury.)

THE CLERK: If your Honor please, Juror No. 1 wishes to ask the Court a question. I asked her to write it down.

THE COURT: That is all right. You can ask a question.

JUROR NO. 1: May I? How does it get to the third position? Is there a mechanism in the car that you press down to make it into the third position?

THE COURT: You may ask the witness the question.

MR. REARDON: I will try and develop that.

THE COURT: All right, Mr. Reardon.

Q Would you be so kind as to come over before the jury so I can explain the question that has been suggested?

Will you put it in the open position, please? Again, in my right hand is the striker and attached to the post. Right, sir?

A Yes, sir.

Q We have got the car oriented just the way it was before, the front by the Judge, the back by the rear of the courtroom.

Now, the striker -- the rotor is in the open

position in Plaintiffs' Exhibit 74, correct?

A Yes, sir.

Q I want you to assume that that is out with this door opened in that position away from the striker. Somebody wants to get into the truck, right?

A Yes, sir.

Q Am I correct that the way that rotor gets into the third position is through the slamming of the door, which has the effect of reotating that striker, that rotor into that position?

A Yes, sir.

Q So that you take that door and you smack it and the rotar hits up against the tongue of that striker and kicks it over into that third position?

A Yes, sir.

Q Just so we are clear, what you formally called the locked position, do you recall now that that is really what is known in the latch business as the secondary position?

A Could be called that.

Q And the secondary position is that position sometimes you put your car door in when you want to back up a little bit, and you want to look out, and you don't want to slam your door entirely, or something like that, or moving your car a short distance? Isn't that the way it happens some

time?

A Or if it doesn't close fully.

Q Or if it doesn't close fully?

A Yes, sir.

Q And that is really what that position is?

A Yes, sir.

Q Is it your testimony before this jury that at the time of this accident that that rotor was in that position?

A I do not know.

Q You did tell the jury this morning that in your professional opinion that was the position that rotor was in when the accident happened, didn't you?

A No, sir, I didn't. I don't believe I did.

Q Didn't you tell them that that was the locked position?

A Yes, sir, I did, but I don't know what position it was at the time of the accident.

Q But now you know that wasn't the locked position?

A That's the secondary position; I will agree to that.

Q Yes, sir, thank you very much. Then you are not supposed to drive your car over long distances in the secondary position, are you?

A No, sir.

Q During the course of Mr. Walkup's examination, he gave you what is known as a hypothetical question. Do you remember?

A I remember the hypothetical question, yes, sir.

Q It was a long question?

A Yes, sir.

Q As they usually are, right?

A Yes.

Q In formulating your opinion, I take it that you understood that he wanted you to accept as so all of the things he stated in the hypothetical; is that right?

A Yes, sir.

Q You accepted them as so?

A Yes, sir.

Q In order to formulate your opinion, right?

A Yes, sir.

Q Am I correct that is some or perhaps all of those are not correct, that maybe your answer to the hypothetical question is not correct?

A That's correct.

Q So, for example, if rather than the vehicle being in the slow lane before the accident, as Mr. Walkup had it in his hypothetical -- you recall that?

A Yes, sir.

Q -- the vehicle was really in the fast lane, that would be something you could consider, wouldn't it?

A That would be considered. It wouldn't change the opinion.

Q And of course speed is something which is always relevant to the occurrence of accidents?

A True, yes, sir.

Q So that if the speed of this vehicle atthe time of the ocvurrence was something in excess of what Mr. Walkup suggested to you, that could have some bearing upon your view of the matter, couldn't it?

A It would be taken into account. It wouldn't change the conclusions any.

Q It would be taken into account along with all of the other factors?

A Yes, sir.

Q Were you told at any time that this vehicle, after it went into this slide, picked up speed?

A I don't believe so, no, sir.

MR. WALKUP: That was in my hypothetical question.

MR. REARDON: If it is, it is.

MR. WALKUP: It is.

MR. REARDON: Your Honor, I am not saying it

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isn't. I am just asking questions. That is all, Mr. Walkup.

MR. WALKUP: All right.

Q Were you told about the conditions of the road at the site of this accident?

A Yes, sir.

Q You knew it was snowy and icy?

A Yes, sir.

Q Were you told, sir, that there has been testimony in this court by the State Trooper who investigated this accident that when he interviewed the driver, that the driver told him that he was travelling in the passing lane at the time he applied his brakes? Were you told that?

A I do not believe so. I don't remember that detail.

MR. REARDON: Will you concede that is not in the hypothetical?

MR. WALKUP: Yes, I will concede it's not in the hypothetical. I had the car in the right-hand lane, in accordance with the testimony by the witness.

MR. REARDON: But not by the trooper.

MR. WALKUP: Well, I can't have the both lanes in the question.

Q Were you told, sir, at any time before you took the stand today that there was testimony given to this

jury by a number of the co-employees of the driver of this vehicle that he had never been seen driving that vehicle before?

Did you know that, or were you told that?

A I had overheard some conversation. I was not told that. I overheard some conversation to that effect.

Q Who was doing the talking?

A I don't remember. I remember hearing something.

Q It wasn't any conversation with me, I take it?

A No, sir.

Q So it would have been Mr. Hirschhorn or Mr. Walkup?

A It might have been.

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T4

Q In your research, sir, in anticipation of your testimony, did you come across the concept of an inadvertent door opening?

A Yes, sir.

Q Tell the jury what that means.

A The door opens without the desire of the occupant, I would term that.

Q Through the activity of the occupant?

A Not necessarily.

Q Sometimes?

A Perhaps so.

Q Reflex action by the occupant under conditions of stress, provoking an inadvertent door opening, isn't that --

A It could happen, yes, sir.

Q You've come upon that, haven't you?

A I personally have not. I've read it in the literature, yes, sir.

Q The literature that you told us you saw in anticipation of testifying.

A Yes.

Q Did you undertake to examine the handle of this door on the interior of the cab in relation to the possibility of inadvertent door opening?

A Yes, sir, I did.

Q And did you incorporate those conclusions in any written form?

A No, sir. I reasoned that the handle to open the door had to come down, and I reasoned that in a turnover accident the man being thrown against the door would probably be thrown upwards and not downwards. So the possibility of him inadvertently opening the door from the inside was remote.

Q Well, did you consider the path that this vehicle took from the time--

A Yes, sir.

Q -- the movement began on the application of the brakes?

A Yes, sir. It would tend to throw him up and out, not down.

Q Up in the air?

A Yes.

Q Well, now, let me see if I'm right.

A It is turning over. It will tend to throw him up and out.

Q You mean when the vehicle turned over?

A Yes, sir.

Q In other words, if I was sitting in a chair, a

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chair, and the vehicle turned over and I were in it as it turned over, I would be tipped over that way, right (indicating)?

A That's correct.

Q Now let's not move it so fast, if we may. Let me ask you this: Do you know that prior to the turnover of this vehicle there was an application of the brakes?

A That's correct.

Q And the vehicle went into literally a perpendicular position with the grass island.

A That's correct.

Q And you had seen this, had you not (indicating)?

A Yes, sir.

Q And you also knew, did you not, sir, that in the course of that travel of that vehicle, while it was on the road, there was no suggestion that there was any ejection of any occupant; you knew that?

A I was told that the door didn't pop open until it hit the curb.

Q Until it hit the curb in the front or in the rear?

A When it started to tip over about 20 degrees. That was, I presume, when it hit in the rear. It didn't tip over when it hit the front, I'm pretty sure. It hit the front apparently twice, according to the diagram, once

with the left wheel and once with the right wheel.

Q Now, in the course of this movement --

MR. SCHWAB: If it please the Court, I am going to object to this line of testimony by this witness as against Pitman Manufacturing Company, and I don't believe the witness has been qualified as a reconstruction expert.

THE COURT: This is cross-examination by General Motors. We'll receive it only insofar as General Motors is concerned.

Q In the course of the movement of this vehicle before the right rear tire struck that curb (indicating) --

A Probably so, yes, sir.

Q -- there would be movement of the occupants, would there?

A Probably so.

Q And in the course of that movement, isn't it common experience that when something is lost control of we tend to try and grab onto something solid?

A Yes.

Q And do you know that there has been testimony that for a time Mr. Lane put his hands out on the dashboard of this truck?

A No, sir, I'm not aware of that.

Q In any event, with this lateral movement, you'll

concede that it would be natural for someone to reach out for something for stability by reflex, would you not?

A I would presume so. I'm not a psychologist.

Q Now, I think you said during the course of your direct testimony that there was some kind of a twisting action that you believe precipitated the opening of this door.

A Yes, sir.

Q And I take it that that twisting would have been caused by the vehicle's motion during some point in its travel until it came to a stop.

A That's correct.

Q And that motion would first be reflected, would it not, along the road surface?

A I don't understand what you mean, "first be reflected."

Q It is a bad question. In any event, at some point, in order to get twisting, you would have to have literally movement of the chassis or frame of the truck, would you not?

A Yes.

Q In other words, to get that movement that you suggested occurred here, to twist and pop that door open, you would have to get that chassis --

A To twist.

Q -- to twist.

A Yes.

Q And the twist would, according to your testimony as I understand it, be reflected in either the frame of the door or in the door itself, right?

A That's correct. Probably in the frame of the door.

Q Probably in the frame of the door. Now, do you recall, at the time of your first examination of this truck, on September 25, 1970, recording any distortion in the frame of the door, rather than the door, along in the area of the striker plate (handing photograph)?

A No, sir. It didn't necessarily have to have permanent distortion. It could have been stress without permanent distortion.

Q You mean you can twist metal and it will go back like rubber?

A It is called elasticity. Steel is a very elastic medium.

Q Are you telling us, sir, that you saw no distortion along the left post where the striker for this latch mechanism was?

A I did not have the drawings of the original design and I did not measure the door, so I cannot determine --

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or I did not determine, and cannot now, whether there was permanent distortion or not.

Q So you did not find any distortion, is that right?

A That's correct. I need not. I can open that without having any distortion either. I can open the door in the model without having any permanent distortion either.

Q Let me see you twist the chassis.

A I don't think I am strong enough.

Q Well, you can open the door without distorting that column. In order to open the door, you said you had to have a twisting, isn't that so?

A The chassis has to twist, that's correct.

Q And you looked at the chassis, didn't you?

A Yes, sir.

Q You had a full opportunity to visually inspect the chassis on September 25, 1970?

A Yes, sir.

Q Did you record any deformation of any kind of the chassis?

A No, sir. I --

Q Just yes or no.

A No permanent deformation, no, sir.

Q Did you record any temporary deformation?

A Well, there is evidence that the windshield popped

out, and that could have been caused by a temporary deformation.

Q Did you ask anybody about that?

A No, sir.

Q Well, do you know that in this case there is testimony that Mr. Leighton, who was strapped in the middle seat of that cab, kicked that windshield out to get out of the truck?

A No, sir.

Q In any event, you recorded no permanent distortion in the chassis, and you had an opportunity to make a thorough visual examination of it, right?

A That's correct.

Q Now, stability of a vehicle has a relationship to the wheel base of a vehicle, does it not?

A That's correct. Yes, sir.

Q And one of the things you went out to look at on September 25, 1970, was the overall stability characteristics of the vehicle, right?

A Yes, sir.

Q Now, did you measure the front or rear axle?

A No, sir.

Q You went entirely around the truck, though, obviously.

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A Yes, sir.

Q And you observed it completely.

A Yes, sir.

MR. REARDON: Would your Honor bear with me for just a minute?

(Pause.)

Q In anticipation of your testimony -- if I asked you this, I apologize -- did you or did anybody ask you to take a similar truck, go out and twist the chassis and see if you could pop that door open?

A No, sir.

Q Nobody asked you to do that?

A That would take a very expensive experiment.

Q It could be done, though, I take it.

A Given the right tools and equipment and time and money, yes.

Q And if you did that, I guess--

A I beg your pardon?

Q If you did that, I guess you would get a result, obviously, wouldn't you?

A If I did it, I would get a result?

Q Yes.

A I would have to, you know, take it in the same position and run it down the road and throw it out of control

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and dump it over. I wouldn't be about to do it.

Q That kind of duplication would be virtually impossible, wouldn't it?

A That's correct.

Q I'm talking about a laboratory technique.

THE COURT: A what?

MR. REARDON: A laboratory twisting of the chassis, either static --

A I don't know if I could duplicate that twisting in a laboratory.

Q Either static or moving.

A I don't know if I could do it or not.

MR. REARDON: Can we concede that the door was obtained by counsel for the plaintiffs on or about April 1, 1971?

MR. WALKUP: Morris is the expert on that.

THE WITNESS: I have in my file a receipt signed by someone for that door. It is in the file. If you look at it, it will give you the exact date.

MR. REARDON: I am really asking about when Mr. Hirschhorn obtained the door.

THE WITNESS: Oh, he obtained the door?

MR. REARDON: yes. I have an interrogatory by Mr. Hirchhorn which says plaintiffs' counsel Morris Hirchhorn

purchased right cab door and lock in the truck involved in this case on or about April 1, 1971, from Mr. Lee Miller of M & M Manufacturing Co., York, Pennsylvania, who shipped said appurtenance by public carrier.

Will counsel concede that is so?

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MR. HIRSCHHORN: Yes, sir.

Q Using that date, April, 1971, can you tell us when you got the door in your possession?

A Shortly thereafter. It was shipped by truck, I believe.

Q Did it come directly to you from M & M?

A It came to my laboratory.

Q Do you know where it came from?

A I presume -- I have no evidence of where it came from. I just got the door.

Q You don't know where.

A No.

MR. REARDON: Can counsel tell us?

MR. HIRSCHHORN: From Pennsylvania.

MR. REARDON: It was shipped directly?

MR. HIRSCHHORN: Directly.

Q Let me show you, if I may, sir, this exhibit and ask you if it fairly reflects the door on this truck in an open position together with a series of pictures showing

the various strikers that you described to the jury this morning, in addition to the hinges.

A It appears to. I would have to go for more detail. But it looks like that.

Q A fair representation?

A It seems so. I assume you have the drawings and the pictures better than I do.

Q If you did of course see the spring loaded striker on this door, it is still on it,isn't it?

A Yes, sir.

Q And you did see --

A It is right here (indicating).

Q And you did see the other striker, which is still on this door --

A That's correct.

Q -- up on the top, isn'tthat so?

A That's correct.

Q So you of your own knowledge can confirm that those two are the same.

A They appear to be, yes, sir.

Q The ones you don't have are the ones that were on the cab of the truck itself.

A No, sir.

MR. REARDON: I offer this in evidence, your Honor.

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MR. WALKUP: I accept that.

(Defendant General Motors Exhibit A104 received in evidence.)

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MR. REARDON: Your Honor, may I walk this by the jury, to save a little time?

THE COURT: Yes. It is in evidence.

Q Mr. Ehrlich, could I use your good services again, please, sir?

In the center of General Motors 104 is a view of the cab plus the right front door, is that right?

A I really can't identify it as the same truck. There are many similar doors, and I would say this looks like it.

Q A fair representation?

A A fair representation of it.

Q And it does show with arrows the position of the various strikers and pictures of the strikers as they existed at least on this vehicle.

A I believe so, yes. Somehow this looks smaller -- what I saw was smaller, in my recollection. I'm not sure.

Q That's the one affixed to the frame of the door.

A To the roof.

Q How small would you say that is?

A Let me look at the picture here myself.

(Pause)

I think in the picture it is hidden, so I couldn't say.

Q Let me show you this. There is no mystery about these.

MR. WALKUP: Perhaps this would clarify it. Is there a scale for that drawing, Mr. Reardon?

MR. REARDON: I am going to use what he may recognize are the actual ones, to save a little time.

Q Do you recognize those as actual replicas of the four strikers?

A Yes. That looks more like the size, yes.

MR. REARDON: I am going to offer them in evidence, if I may. He can mark them as one exhibit, if that's all right.

(Defendant General Motors Exhibit A105 received in evidence.)

MR. REARDON: Your Honor, would this be an appropriate time for an afternoon recess?

THE COURT: I had planned, because of the interruption, to go right through. But, if you want a recess, all right.

Would the jurors want a recess now?

MR. REARDON: Okay. I'll finish, then.

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Q Do you know if before you were retained anybody else looked at this truck?

A No, I do not know.

Q Do you know if after you were retained by Mr. Hirchhorn any more other expert looked at this truck?

A No, sir, I do not know.

Q Have you communicated with Mr. Severey, whose name has been mentioned here?

A The only communication was that I called him up, telling him that the latch was on the way, or something like that, was being shipped to him. I think that's the only communication I had with him.

Q During the luncheon recess did you look at the photographs and his deposition as we discussed this morning?

A No, sir, I did not.

MR. REARDON: Will counsel concede, subject to verification, that the photographs we are talking about are bound to the deposition?

MR. WALKUP: Absolutely.

Q You said you never made any or drew any conclusion that there was anything wrong with the hinges.

A That's correct.

Q Do you know whether or not there was ever a claim

made in this case that the hinges were bad?

A Not to my knowledge.

Q Were you ever told that there was a contention by the plaintiff at some point that the right front door of the truck chassis, its hintes and/or door lock was unsafe and unfit? Did you know that?

A Did I know that that was a claim made?

Q Yes.

A No, sir, I did not.

Q Did you know that a claim was made that the right rear tire was bad? Did you know that?

A I know we discussed the condition of the right rear tire. I inspected it and I could find nothing wrong with it.

Q Did you know that after the case was brought that a claim was made that the tire was bad?

A No, I do not know what claims were made. I have never seen any claims that were made, so I don't know what claims were made.

Q Did you participate in writing out the nature of the technical position of the plaintiff at any time?

A I suggested the problem with the door latch. I said this is something that in my opinion was defective. I discussed the tire. I thought there was nothing wrong

with the tire. I looked at it, inspected it. My report indicates I found nothing else wrong.

Q As a matter of fact, didn't you state in your report, from your visual inspection, that you could not ascertain any mechanical or design defect that could have caused the accident?

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A Other than the door latch.

Q Well, caused the accident. Is that what you said?

A Caused the accident? That's correct.

Q So that there is no mistake about it, do you recall saying, indicating, "From this visual inspection I could not ascertain any mechanical or design defect that could have caused the accident."? Did you say that? Yes or no.

A That's correct. I went on to say further --

Q I understand.

A -- that I would have to take more tests in order to do that.

Q You would have --

A I was concerned about the way the --

MR. SCHWAB: Objection as to what the witness was concerned about.

THE COURT: Oh, I'll allow him to answer.

A (Continuing) I was concerned about the stability, that is, the big boom and the heavy weight up top, which

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would tend to cause the chassis to rock, and things like that. And I said I needed more tests to do that. I did not rule out any --

MR. SCHWAB: Objection. I assume that this is not binding on Pitman.

THE COURT: Correct.

Q Did you do any such tests?

A No, sir. I could not do any tests. Mr. Coons would not allow me.

Q Coons of Pitman?

A That's correct.

MR. REARDON: That's all I have, your Honor.

CROSS EXAMINATION

BY MR. SCHWAB:

Q It was your understanding in York, Pennsylvania, Doctor, that the vehicle had been delivered to York, Pennsylvania, on a flatbed truck, is that correct?

A I do not know how it got there. I was told that the vehicle --

Q No. Doctor, would you bear with me? I am going to ask you direct questions, and if you give me direct answers --

A Very good.

Q -- you'll get off the stand very quickly.

* * *

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example, under the facts of a given mounting of a curb and twisting and torsion of a truck, whether a given part might, say , open a quarter ofan inch or distort a quarter of an inch as opposed to three-eighths of an inch.

MR. REARDON: I object, your Honor.

THE COURT: Can you answer the question?

THE WITNESS: Yes, sir.

On the model, the interference is an eighth of an inch, which at about a quarter scale is equivalent to a half inch interference. That is even greater than the three-eighths in the Reardon position, so it could distort, and the model showed that.

MR. REARDON: Your Honor, the model that was offered merely for illustrative purposes, and to use that as a basis for comparison to the actual latch I don't think is appropriate.

THE COURT: Can you answer the question without reference to the model?

THE WITNESS: Yes, sir.

It could distort more than three-eighths of an inch.

Q Again, if I may, since Mr. Reardon has another position right up close to the jury, I would ask you to step down to the position closer to the jury with this

* * *

open the door if there is this twisting which you say occurs in vehicles?

A No, sir, no amount of distortion of the frame would open this unless it was sufficient to actually tear the metal apart.

Q Can you show us with that model why that is?

A You can see how the latch has completely gone around the bolt part, and the head is in here trapped. It cannot move out in any way.

THE COURT: That is really what you call the encapsulated action?

THE WITNESS: Some people call it encapsulated, yes.

Q Now, if you would just resume your seat, I am almost through here.

You were asked some questions by Mr. Reardon about the slamming of a car door, and you were then asked some further questions by him about an involuntary reflex action of a passenger in turning over or in an accident grabbing for the dashboard or grabbing for some other object to hold upon. Do you recall that as a point of reference?

A Yes, sir.

Q You were asked about experience in opening and closing car doors. In my hypothetical question, I em-

* * *

fact that there were other appurtenances to be placed thereon, I would hold that the date of the accrual of the claim in this case is June 2, 1967, and that the action was timely brought and the claim was timely presented.

MR. WALKUP: In view of that ruling, your Honor, we now formally on the record dismiss our negligence cause of action and will proceed for the balance of the trial, and the Court can so charge the jury, solely on the remaining strict liability cause of action. And to clarify the record, we have heretofore voluntarily dismissed the breach of warranty cause of action upon the belief that it is substantially equivalent to the strict liability cause of action.

THE COURT: So we have the single claim in the case now, the products liability claim.

Mr. Reardon, without citing any cases, and I don't have any in front of me, I think it is perfectly obvious that what was contemplated in this case was the delivery of the vehicle to the Jersey Central Power and Light Company as a completed product, which General Motors knew or was aware of and played a role in. And for that reason, without going into additional reasons, which I can spell out if it is required, I am holding the date is June 2, 1967.

MR. REARDON: May I respectfully except, your Honor?

* * *

fair and accurate representation of the vehicle.

I think there is one extra item that appears on the photograph, an axle, as a matter of fact, the removed axle is shown strapped on there, and we know that wasn't there at the time of the acident, but that is basically the vehicle.

MR. WALKUP: All right.

MR. SCHWAB: It has our own name on the back relative to the photograph.

MR. WALKUP: It does, and it refers to the model and it's a picture of the right side of the vehicle as indiciated on the back.

The next witness is Mr. Lane.

D A V I D W I L L I A M L A N E , one of the plaintiffs, called as a witness in his own behalf, being first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. WALKUP:

Q Mr. Lane, where do you eside at present?

A It's Star Route, Box 338, Norwich, New York.

Q What is the general type of area where you reside?

A The hills, the low land of the mountains in central New York.

Q What is your date of birth?

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A. February 29, 1940.

Q. How old are you at the present time?

A. Thirty four.

Q. How old were you at the time of your truck a-cident?

A. Twenty nine.

Q. Give us briefly your educational background before the date of the accident.

A. Well, I was a high school graduate. I had six months of college. Service training schools, plus I had gone to line school for the company, and I was studying at the time an International Correspondence School course of basic electrical engineering.

Q. When you say for the company, what company are you referring to?

A. Jersey Central Power & Light.

Q. It might help if you just give us briefly your work history from the time you started to work just in, you know,, relatively quick fashion, the jobs you had from the time you started to work until you were hurt.

A. From the time -- from service or from before?

Q. Whenever.

A. Well, I started out as a -- about ten, eleven years old, as a caddy. Then went from caddy to a baker's

apprentice. From a baker's apprentice, I went to lifeguard. Lifeguard, I went into service.

From service I come out and I went for J. F. Kiely Construction Co. Worked there for three years, and then I transferred over to Jersey Central Power & Light when I was hired there in '65.

Q. Waht kind of work did you do for Kiely Construction?

A. I was a utility worker, which amounted to -- a person who dug ditches.

Q. Were you here when Mr. Westervelt testified the other day about the various steps you went through in the power company?

A. Yes, sir.

Q. Did that correctly recite your work history with the power company?

A. Yes, sir.

Q. Areyou married?

A. Yes, sir.

Q. When and where?

A. 1961, North carolina.

Q. Was this your first marriage?

A. yes, sir.

Q. First marriage for your wife?

A. Yes, sir.

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Q. As a result of that marriage, do you have any children?

A. Yes, sir, three.

Q. What were their ages and sexes as of the time of your accident?

A. Well, it's four years ago. Davie was seven at the time of the accident. That's my oldest boy. My youngest boy is -- was five at the time of the accident. My daughter was roughly around eight months old a the time of the accident.

Q. With reference to your marriage, would you characterize it for us as to whether it was compatible or incompatible or what?

A. Well, I'd say it was compatible, normal, average marriage. Got along fairly well.

Q. Had you or your wife during the period of the marriage separated or sought divorce proceedings or any kind of legal separation?

A. No, sir.

Q. as far as your work and your job was concerned that you worked with for the power company for a number of years, did you have some reason why you were in that particular type of work?

A. Well, I liked outdoor work very much. That was

my preferment. If I could get a job, I would rather work outside and line work I enjoyed very much.

Q. Did you, before your accident, have plans as to what your life's work would be?

A. Yes, sir.

Q. What was that?

A. I was going to stay with the power company, and I had -- was trying to bring myself up in education so I could advance further.

Q. That is that International Correspondence School courselyou were talking abou?

A. Yes, sir.

Q. We know from Mr. Westervelt that you had progressed through the ranks usp to lineman. Were there some jobs in higher classifications in the line department that you with your education and background would have been qualified to do?

A. Yes, sir.

Q. What were the reasonable expectations of advancement with your background and experience and education?

A. Chief lineman.

Q. Chief lineman?

A. Right.

Q. I want to ask you some questions about the truck that

was involved in the accident. How long had you been familiar with that truck yourself before the accident, approximately?

A. Approximately six months.

Q. Had you ridden in it during that six months?

A. Yes, sir.

Q. With what degree of frequency?

A. Just about every day I went out.

Q. Had you driven it yourself on any occasions?

A. Yes, sir.

Q. How many times had you driven it?

A. Half a dozen times.

Q. From your riding in it and the half a dozen times or so that youd rove it, did you yourself make any observations as to any particular riding characteristics or handling?

A. Yes, sir.

Q. Would you tell the Court and jury what your own observations were in your own words?

A. Well, first time I drove the truck --

Q. Don't whisper. There is noise andpeople have to hear you, and you might as well be talking to yourself.

A. The first time I drove the truck, I found it very hard to handle. It was swaying quite a bit and due to the -- at that time I believe it was a high wind blowing, and I was keeping the truck motioning back and forth.

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Q. Dave, I don't want to pick on you but the jury has to hear what you say or don't say it. So kindly raise your voice.

A. Well, the first day I drove it I found it quite hard to handle on the open road. She was swaying, and I believe there was a heavy wind that day, and it was keeping me off to one side a lot.

Q. With reference to the physical setup of this truck, as to the arrangement of it, were there some compartments for carrying equipment to the jobs and so forth?

A. Yes, sir.

Q. What do you call those?

A. Your supply bins.

THE COURT: Supply bins?

THE WITNESS: Yes, supply bins and tool bins.

Q. This particular truck, you had worked with other Jersey Central line trucks, ahdn't you?

A. Yes, sir.

Q. As far as getting up and looking into the bins on this truck, was there any difference about the height of those from the other trucks?

MR.SCHWAB: Objection.

THE COURT: I will allow it.

A. Yes, sir.

Q Would you explain what you mean by that?

A Well, it was higher than the normal truck or the littler trucks were, and for a short man, you couldn't see over the edge of the bin. Even myself a five foot ten, I had to stand on a wheel so I could see what was in the bottom of the bins to get anything out of them.

Q While I am thinking about it, you told us your height. What did you weigh at the time of the accident, approximately?

A 185 pounds.

Q How would you get up to the bins?

MR. SCHWAB: Objection.

MR. WALKUP: Withdrawn.

Q How about the tires on this truck? Had you seen any Jersey Central truck or worked in one before this occasion that had tires the same as this big truck?

A NO, sir.

Q What was the difference between the tires on this as you observed them as a lay person?

A Well, these were big doughnut type tires, I would call them, whereas in the other Jersey Central trucks I had rode in, all had dual tires, dual wheels in the back.

Q Did you in your driving or riding experience make any observation as to how these tires affected the

handling capacity or the riding capacity?

A. It didn't seem to help it too much. I mean it's --

MR. SCHWAB: Your Honor, I am going to object while Mr. Lane is searching for an answer there, because I don't believe he is qualified to answer that question.

THE COURT: He is describing his own experience, I think.

A. They didn't seem to make -- steady the truck like a set of dual tires would.

THE COURT: Read that answer, please.

(The last answer was read.)

Q. Did you make any observations yourself about the appearance of that truck insofar as the front and rear axles were concerned?

A. Yes, sir.

Q. What wereyour observations at least as a lay person on the axle configuration?

A. The back axle was shorter than the front axle.

Q. Before your accident and during the period of six months or so that you were familiar with this truck, did your yourself make any reports or complaints to anybody there at the company about the manner in which this truck was handling?

A. Yes, sir, the first time I drove it.

Q To whom did you make any such recorded complaint?

A Kenny Leighton.

Q Who was Kenny Leighton? I know who he is because I met him here, but with reference to you, what was his category?

A He was our shop steward and he was the driver for the truck.

Q Show steward for the union?

A Yes, sir.

Q and also a driver of that truck?

A Yes, sir.

Q Was he the regular driver, if there was such a thing?

A Yes, sir.

Q Did you mention it to anybody in the supervisory or foreman capacity before the accident?

A Yes, sir.

Q Who was that?

A Mr. Conroy, my foreman.

THE COURT: Mr. who?

THE WITNESS: Conroy, my foreman.

THE COURT: Conroy?

THE WITNESS: Yes, sir.

Q I want you to go to the events of the accident

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and on the day of the accident what time did you report for work? What was your nromal time of getting down to the yard where the truck would eventually leave from?

A. Quarter to eight.

Q. What is your best recollection as to the time that the truck left the yard on the day of the accident?

A. Eight o'clock.

Q. Will you tellus your observations about the weather and road conditions on the day of the accident?

A. It was snowing. Some parts were slippery.

Q. Will you tell us your recollection as to the general speed that the truck was following from the place where you left the yard there to the point of the accident?

A. Between twenty, twenty-five, not more than twenty-five.

Q. Mr. Burlew, did you know him?

A. Yes.

Q. Had he been with the company very long at that time?

A. No, sir, he was new.

Q. As far as the trip, taking it over the several miles between the plant and the place where the accident happened, on any of those occasions didyou notice any particular different problem with the truck on that day

than any other day?

A. Not, that I remember.

Q. What in general when you got on Route 9 was the traffic conditions, that is, of other vehicles, if you recall?

A. Not much around.

Q. Approaching the place where the accident happened, within a block or two, what is your recollection, if you have any, as to the speed that the vehicle was traveling at that time?

A. Just before the accident?

Q. Yes.

A. It was considerable slower.

Q. To what degree and --

A. Well, I had glanced up and there was an intersection coming up, and the driver had been slowing down. I think there was a light there or something.

THE COURT: Mr. Lane, I have to ask you to raise your voice.

THE WITNESS: Okay.

THE COURT: I think the jurors may be having difficulty hearing you. I know I am.

A. Well, just before the accident happened, we had started slowing down. There was an intersection coming up. I think there was a light there but --

Q In the front seat, what was the lineup of passengers?

A Burlew was driving, Leighton was in themiddle, and I was next to the right door.

Q When you got in, had somebody closed the right door?

A I did , sir.

Q AT the time of the accident, was that right door, as far as you know, the same way as when you had closed it?

A Yes, sir.

Q At the time you had closed it, what if anything had you done to the door?

A I had closed it and locked it.

Q In that particular truck, how did you lock the door?

A I don't remember. That was four years ago, sir.

Q Is it a button type of lock or some other type lock?

A No, it doesn't have a button.

Q What type does it have? Please keep your voice up.

A No, it didn't have a button. It was in the handle.

Q Do you recall at this time how the handle worked

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to lock it?

A. No, sir.

Q. With reference to the right door, where were you seated; that is, how close to the door, touching the door, a few inches from the door, or what, as best you recall, before the accident?

A. I was a few inches from the door, I believe.

Q. Were you wearing a seat belt?

A. No, sir.

Q. What was the first knowledge that you yourself had of the accident or that there was going to be an accident or it looked like an accident?

A. When the truck, the rear end, started sliding.

THE COURT: I didn't hear the answer.

THE WITNESS: When the truck, rear end started sliding.

Q. Dave, you know I talk for a living and you don?t

A. Right.

Q. But can you please try hard to raise your voice?

A. Yes, sir.

Q. Will you tell us what you first observed about the slide?

A. Well, Iknow the truck was slowing down, and the

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rear end started to go out and the driver tried to bring it back under control, but he lsot t again, and she went-- started going all the way around.

Q. When you say started to gout out, can you help us by putting it in directions and the way you were traveling?

A. We were traveling northbound, and the truck rear end started sliding to the right.

Q. When it started to slide to the right, what if anything did you do yourself in the cab?

A. I shot my hands forward to the dashboard.

Q. Can you illustrate?

A. Like that (indicating ) and held onto the dashboard.

Q. Then when you were in that position, what did the truck continue to do?

A. It was still sliding and then the left front wheel hit the curb, and then the right went up on the curb, and then she started going across the divider.

Q. what about the rear of the truck? What did it do?

A. It mounted the curb itself.

Q. At any time during this procedure, did you observe anything about the door on the side next to you?

A. Well, as we were going up over the divider, the door popped open.

Q When you say popped open, can you explain what you mean?

A Well, I had braced myself and we had already hit the curb and gone over and my -- and I heard this noise, a loud noise,and the door went open.

Q At that time what happened to your body?

A Well, my feet started going out the door as the truck started laying over.

Q Did any part of your body hit the windshield or the dash at any time?

A No, sir.

Q Did any part --

MR. REARDON: Your Honor, could we hace the witness describe what happened to his body?

THE COURT: Yes, avoid leading now and let the witness answer.

Q Let me ask you this: When the accident was all over, state whether or not you had any head injury.

A No, sir.

Q Did you lose consciousness in the accident?

A No, sir.

Q Did you have any scars or bruises on yourhead?

A No, sir.

Q Then you described your feet started out the door.

A. Yes, s ir.

Q. Describe what position your body took when your feet wne tout he door?

A. Well, my body started sliding down, and my feet went out. I didn't bounce around or anything.

And then as the truck -- we know it landed eventually on its side.

A. Yes.

Q. As the truck went from the beginning to tilt to its side, will you describe in your own words the speed with which that happened?

A. Well, to me it was like a slow motion camer, or it seemed like everything slowed down in my eyes, because I watched my feet go out the truck, and my body slide down, and as the truck started going over, all the way over, and while I finally wound up with my legs out, partially out of the truck, pinned under the fender in a jacknife position.

Q. You refer to a jacknife position, and within an hour or so after you were hurt, were you over there at the Jersey Hospital?

A. Yes, sir.

Q. Did somebody over there ask you there right then, you know, what had happened to you in the accident?

A. Yes, sir.

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Q. Did you tell them?

A. Yes, sir.

Q. When you say you were in a jacknife position, will you explain to the Court and jury when the wreck was all over, what you mean by being in a jacknife position?

A. Well, it's basically like being in a position you would take for a jacknife dive.

Q. How long did you remain in that position until you were extricated?

A. I don't really remember how long it was. I think it was about a half hour.

Q. Do you remember having the truck moved off you?

A. Yes, sir.

Q. During the time you were lying there after you ended in this jacknife position until the truck was moved off of you, state whether or not you felt any change about your body or any places that hurt or any problems.

A. Well, I had complete numbness from the waist down on my body. There was no sensation. Until I looked at my legs, I didn't even know I was caught.

Q. Then do you remember any other people that were in the front seat coming in contact with you either before or after or while you were getting into this jacknife position or at any time there before you got out?

* * *

MR. WALKUP: Thank you.

Derwyn Severy.

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D E R W Y N M. S E V E R Y, called as a witness by the plaintiffs, being first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. WALKUP:

Q Mr. Severy, where do you reside?

A Santa Monica, California.

Q And what is your occupation?

A I am a research engineer dealing with transportation and industrial accidents.

Q Does your research include the conducting of vehicle collision experiments?

A Yes, it does.

Q And what types of vehicle collision experiments have you conducted?

A I've conducted several series of headon type collisions, intersection type collisions and rear end type collisions as well as collisions that involve vehicles that upset, collisions between vehicles and fixed objects, such as guard rails, bridge railings, barriers, collisions between pedestrians and passenger vehicles, between passenger vehicles

and motor vehicles, between trucks and buses, and between passenger vehicles and trucks and buses.

Q Now, would you briefly explain how these experiments have been conducted?

A Yes. The type that I've just described constitute what we call full scale crash studies, in which we use types of vehicles that you see on the highway, instrument them, meaning that we apply special sensing devices so that we can record engineering type information, and then cause them to crash under conditions that would be equivalent to the kinds of accidents that occur on the highways and in the city.

And then, to add a little additional reality and information that we can gather from those simulated accidents, we put anthropometric dummies in these vehicles. These are engineered mannikins that look like human beings and under crash conditions respond as a human would be forced to respond. They are also instrumented.

And, incidentally, we sometimes use live subjects, humans, but those are in low speed, less dangerous type impacts.

And, then, instrumenting these anthropometric dummies, we have high speed photographic and special photographic equipment that is synchronized timewise with the

electronic transducer, or instrumentation, that I mentioned. It is in automobiles and also on the persons that we are simulating with.

They are synchronized so that at any one thousandth of a second following the contact between a car and some objects or anoth-r car or another truck, or whatever, the system that is going on, whatever is going on -- if it is, for example, an individual simulation of an individual in the vehicle crashing against the windshield, we can stop that at any instant and determine what the forces are on the vehicle and on the individual that is undergoing that kind of impact.

MR. REARDON: Your Honor, if I may, may I ask, by way of clarification, if this is by way of qualifications as distinguished from specific testing of this type done in connection with the vehicles involved in this case, or the vehicle involved?

MR. WALKUP: It is offered by way of qualification for the testimony upcoming, your Honor.

MR. REARDON: Okay. Could that be made clear to the jury, your Honor?

THE COURT: Well, the witness' testimony that was just given was for the purpose of having the Court decide whether or not he can be qualified as an expert. I would

assume that a hypothetical question would be put to him based on the testimony in this case. And a determination as to whether or not he is qualified is made by the Court and the credibility of the witness, the acceptance or rejection of his testimony, as I have told you previously, of an expert is up to the jury.

Anything else you desire?

MR. REARDON: No, thank you.

BY MR. WALKUP:

Q Have you supervised collision experiments that duplicate an actual accident that you have previously examined and reconstructed?

A Yes, I have, on many occasions.

Q And could you describe that technique?

A Yes. Where a particular accident has engineering and medical information, I work with medical scientists in some of the research that I've done, of a quality that would enable and make it worthwhile to recreate the accident situation as near as practicable.

The same make, model, year type vehicles are purchased, ones that have not been as yet wrecked, and are caused to crash in the manner in which the accident has been reconstructed, if it is the angle, the speeds, the conditions of how they contacted one another.

Individuals are selected, anthropometric dummies and I have manufactured these and we have produced them in sizes from infant to full adult size. And the particular size that correlates or corresponds with the individuals involved in the actual accident are selected and put into the vehicles. They are instrumented.

The accident is then caused to reoccur in an experimental manner and then the forces that are generated, the accelerations that are sustained, the lacerations on the anthropometric dummy, the trauma he is subjected to instrument-wise is recorded and compared with the medical information on the actual injuries sustained by the person undergoing the similar exposure.

This gives us an opportunity to get a nearly one to one comparison between the engineering type information, such as how many pounds force the individual may slam against something as contrasted to what the residual medical information was for that particular accident victim having gone through a similar experience.

Q Now, in connection with your collision research, approximately how many laboratory impact tests have you conducted?

A Several thousand laboratory impact tests.

Q And how has your research been further assisted by

investigation of directly related accidents?

A Because of investigating directly related accidents I am able to understand the conditions, the problems that prevail in what I term the real world situation, conditions that occur outside, and then I can develop a particular experimental program, crash studies, that will answer more questions than if I attempted to do it without an understanding of the problems that I should be researching.

Q Now, how many vehicle accidents have you personally investigated?

A About six thousand.

Q And how long have you been in private practice?

A Since the summer of 1970.

Q Before that were you employed by a university?

A Yes.

Q What university?

A University of California at Los Angeles, known as UCLA.

Q And in what position were you employed there?

A I was employed as a lecturer in engineering and as a research engineer in 1950, and I also became the director of automotive collision research. I was assigned to the Institute of Transportation and Traffic Engineering, which is an institute under the College of Engineering and

is administratively managed by the College of Engineering.

Q Were many of these tests that you described performed in your capacity with this Traffic Institute at UCLA?

A Yes.

Q And as part of their program?

A Yes.

Q What degrees do you have, sir, and from what universities?

A Well, in 1949 I received a bachelor of science degree in engineering, and that was from UCLA. I continued my studies and in 1950 I received a master of science degree in engineering. And then I was hired full time by the university, as I mentioned, as a lecturer in engineering and also as a research engineer.

But in those days we had the opportunity to continue in education part time, so weekends and evenings when I could find time I studied on a doctorate degree, and I completed two of the three fields in my doctorate study. I do not have a doctorate degree, and the studies were terminated by order of the university for all students under that category about something like 1956, somewhere in that period.

Nevertheless, the two fields that I did complete

the examinations and studies on were biotechnology of the human environment, and that involves human factors engineering, sort of the man-machine environment type evaluations and engineering studies. The other was industrial safety engineering, which as the name implies concerns the various industrial processes and the effects on individuals as to injury exposure.

Q Now, in this work that you have done, you've told us about some of the motion pictures that were taken, have you also had experience in still pictures of accidents?

A Yes. Some of the photographic devices we have were electronically fired to enable us to capture certain points after an event starts, and those provided still photographs. Then we have high speed motion picture cameras that would enable us to stop any action at a finer point and develop stills from them.

Q And have you had experience then in photographic interpretation?

A Yes, and I have developed techniques in that regard and published three papers with the Society of Motion Picture and Television Engineers and I think also the Instrumentation Society of America.

Q Have you written other publications in your field of expertise, and if so, what journals or give us some idea

of quantity and type of articles that you have written and published.

A Yes. Well, in the past twenty four years I've pbulished about seventy, a little over seventy, papers; I've published two this year so far in the field of automotive collision research. And of those, I would say more than from any other single source, the Society of Automotive Engineers was the publisher.

I've also published for the Highway Research Board, National Academy of Sciences, the Naitonal Academy of Engineering, the National Safety Congress and their annual symposium and congress, as they call it, certain medical and legal journals, the Society of Motion Picture and Television Engineers.

There are others that are similar to those.

Q Now, do you hold membership in any professional societies? And if so, which?

A Yes. I hold membership in the Society of Automotive Engineers since 1956.

Q There has been reference to that earlier here. What is the Society of Automotive Engineers?

A Well, you know, it is commonly known as SAE, and the Society is a collection of, generally, engineers, but there are other people who are in the engineering or allied

fields that are also members. Some of them are in administrative branches of engineering. And they act collectively to continue to disseminate technical information from various industries, universities, from the Government research as well, the private sector, through the Society in publications and to assist in the development of standards or recommended practices that the Society feels are advantageous to the promulgation of an efficient engineering organization and in assisting manufacturing.

Q Does that Society have various divisions which work on various engineering problems, say with reference to vehicles?

A Yes. They are usually called committees or subcommittees.

Q And have you, just parenthetically, been involved on the Society of Automotive Engineers Committee on door latches?

A Yes, I have.

Q And what has been the nature and extent of your experience on the door latch committee?

A Well, I was very active with them during the years when they wrote the JA 29B, I believe it is, standard or recommended practice having to do with door latches. Some of the research which I had conducted in earlier eyars, as

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early as 1957, was instrumental in developing that particular standard. That standard also became, I think it was --

MR. REARDON: Objection, your Honor. I object to "that standard also became."

THE COURT: Yes. I will sustain what the standard became.

MR. WALKUP: All right.

Q Have you received any professional achievement awards from industry or government or private institutions?

A Yes, I have, a number of such awards. You mentioned the motion pictures. I have generated about twenty documentary motion picture films on this subject and several of them were recipients of the International Film Festival Award, I think at least two of them for the top honor, bronze plaque.

And then I received, back around 1960, '62, somewhere around there, maybe a little earlier, a General Motors award fro contributions to motoring safety. I think California State had something like an Engineer of the Year Award, and I was recipient of that.

And there have been other awards by societies for papers, the Society of Motion Picture and Television, Best Scientific Paper of the Year, and things of this sort.

Q Are you a consultant to any state or federal

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organizations or agencies?

A Yes. I am currently a member of the Attorney General's Committee on Automotive Safety. In prior years I had been with the Department of Health, Education and Welfare, U. S. Public Health Service, serving as one of eighteen scientists on a panel that would meet sometimes only on a monthly basis, sometimes more often, for purposes of reviewing research grants and applications that the Government received in connection with automotive safety for evaluating the research that was ongoing at various universities, in private industry, and by the Government, whatever, to be funded or continue to be funded, and then determine whether or not our particular council felt the moneys should be awarded.

Then, additionally, after that, I was selected as one of nine scientists by the General Services Administration of the federal government, that is, part of the Department of Commerce, to serve to develop teh GSA standards. These were the standards that in the early years were deemed by the federal government as necessary in connection with the purchase of vehicles by the federal government having to do with automotive safety.

Then, in more recent times, about 1966, the late President Johnsoh appointed me as the chairman of the

Research Committee and vice-chairman of the National Motor Vehicle Safety Advisory Council, and I served my tenure of three years in that capacity until 1970, and the Council meets about once a month to advise the Secretary of Transportation of the federal government in matters of automotive safety and the Council continues to act and I continue from time to assist them.

Even now, for example, we are having a summer meeting at which I've been asked to make a presentation.

Q Have you testified in matters of vehicle collision reconstruction and vehicle construction in various courts in various states of the United States?

A Yes, I have.

Q And have you testified for various automobile manufacturers as to matters in your field of expertise in such cases?

A Yes, I have.

Q And including, for example, what companies?

A Well, Ford, Chrysler, American Motors, General Motors, Volkswagen, some others.

Q On the other side of the coin, have you sometimes been in a position where you've testified against various such manufacturers?

A Yes.

Q All right. Now, sir, at my request, or rather at Mr. Hirschhorn's request, did you undertake to perform certain studies and render certain opinions in connection with an accident involving David Lane and a certain power company piece of equipment?

A Yes, I did.

Q And have you brought here with you to court your complete file relating to the work that you've done on that matter?

A Yes.

Q And was your deposition taken by counsel for the defendants in California in this matter several months ago, lasting about ten hours?

A Yes.

Q Relating to the subject matter of this case?

A Yes.

Q Now, you made your file available to counsel at that time, correct?

A Yes, I did.

Q I want to start out with the history of the construction of this particular vehicle involved in this accident and from the documents and material that have been reviewed by you I'll ask you if you are generally familiar -- and this is intended to be a timesaving question and it

is somewhat leading -- but with the general history of General Motors in about November 1966, making a 7500 series truck chassis with rear duals and standars 10 x 20 truck tires, with a tilt cab and a four man seat and a Colman front axle, just as background.

MR. SCHWAB: May it please the Court, although I am not the one to object to this question, if counsel has finished qualifying the witness to the extent that he deems proper, I wondered whether the Court would entertain a voir dire of the witness.

THE COURT: Mr. Reardon? You are first, if you want to question him.

MR. REARDON: No, I have no voir dire, your Honor.

THE COURT: Mr. Schwab.

MR. REARDON: I will interpose an objection in any event to the form of the question.

THE COURT: You haven't heard it yet, have you?

MR. REARDON: I didn't get a chance. Mr. Schwab was on his feet before I could even stand up. But I am happy to have him go ahead.

VOIR DIRE EXAMINATION

BY MR. SCHWAB:

Q Mr. Severy, you spoke of two papers that you have

presented this year. Would you tell me the titles of those two papers?

A Yes. I can't recall the exact titles. One has to do with highway design, and it is being published by the Institute of Traffic Engineers. The other has to do with automobile-bicycle impacts. It seems to be a popular subject now.

Q In other words, collisions between a vehicle and a bicycle.

A Yes. And also bicycle and other objects.

MR. REARDON: An unpopular but relative subject.

MR. WALKUP: Timely.

Q Just to give us a sphere of reference, sir --

THE COURT: A what reference?

MR. SCHWAB: An area of reference, a parameter of reference.

THE COURT: I thought you said a smear of reference.

Q (Continuing) -- you spoke of receiving two awards from the International Film Festival on Pictures. Will you tell me what the general subject area was of each of those films?

A I think there was more to it. I think there were three or four, sir.

Q I am not trying to limit you as to the number of awards.

A I am trying to think of it. One was called, I think, something to the effect of Intersection Collision, Series 2. It is on at least that research. And both had to do with a crash program, both the higher awards. Then we had some kind of -- whatever comes under that, under the bronze plaque, is a special mention or something. It is kind of a paper plaque. And those -- I think we got two of those total. They stayed with the university, incidentally. I didn't get the bronze.

Q From what you've said, I gather that a great deal of your work has been with regard to what happens to an occupant inside a vehicle in a crash or accident condition, is that correct?

A Yes.

Q That would be the purpose for the anthropometric -- do I pronounce that correctly?

A Yes.

Q -- dummies that you spoke about, is that correct?

A In part. But, you see, notwithstanding what happens to him, what he does to the vehicle is important too, such as inertial loading.

THE COURT: Such as what?

THE WITNESS: Inertial loading.

Q And is it correct that various of your papers deal with the question of restraints of occupants inside an automobile to minimize or prevent injury?

A Yes.

Q And when we are talking about restraints, have you written papers dealing with the matter of seat belts as a means of restraint?

A Yes.

Q And in your area of expertise does that relate to questions of inflatable bags that protect a person from injury?

A Yes.

Q As a possible restraint. You spoke about a motorcycle. Did that have to do with injuries sustained by an occupant of a motorcycle under various conditions?

A And the individual that was in the automobile. In one instance, a motorcycle has punched the guy's head.

Q And have you written a paper dealing with the question of, I think it is called, the LM automobile, a design automobile by the Liberty Mutual Insurance Company to protect passengers inside the automobile?

A Yes.

Q And the entire area, then, of what happens to the

person inside the automobile and the effect of the person inside the crash automobile on the vehicle itself, this is an area in which I gather you hold yourself out as an expert, is that correct?

A Including trucks and buses.

Q Well, yes, what ahppens to a person -- I didn't mean to limit that.

A Yes.

Q A person inside any vehicle, be it a truck or a bus or, for that matter, a motorcycle even, correct?

A Sure, or pedestrian.

Q Or a pedestrian. Well, by that do I understand you've written articles and have done studies on ways of minimizing potential injuries to pedestrians who are in contact with automobiles also, is that correct?

A Attempts at that, yes, sir. It is frustrating, but I tried.

Q And in addition to what we've discussed, your studies have taken you, have they not, into the question of the design of certain types of seats to minimize injuries to passengers, is that correct?

A That's correct, sir.

Q And also your studies and your work in this field have taken you into the area of various types of head

restraints to minimize injuries of passengers in vehicles, is that correct, Mr. Severy?

A Yes.

Q And would it be in this area that we are discussing now that you would consider yourself and hold yourself out to be an expert, is that correct?

A Yes.

Q For purposes of this case as well as for the studies which you've done in the past, is that correct?

A Yes.

MR. SCHWAB: Thank you.

I might say, your Honor, that there are facets anticipated to Mr. Severy's testimony to which I would submit that he is not qualified as an expert, and yet there is clearly an area where, without discussing matters that are within the province of the jury, it would seem that he may be qualified as an expert. And I'm not quite sure how the Court desires to find or segregate these different areas.

MR. REARDON: Your Honor, I don't want to get into a discussion in the presence of the jury about what counsel's observations are. I don't think that is appropriate. I think the issue is whether or not, based on the question raised, there is an objection. I make an objection.

THE COURT: It would depend on the question that is put.

MR. SCHWAB: All right.

MR. REARDON: I make an objection to the form of the pending question. I am interesting in saving time.

THE COURT: I haven't heard any --

MR. REARDON: The one that provoked the voir dire, your Honor.

THE COURT: We will start from scratch. Put your question now.

MR. WALKUP: If there is an objection to it, I'll have to ask a hypothetical question that is a little longer, but I will do it.

MR. SCHWAB: I don't remember the pending question, I must say, your Honor.

MR. REARDON: I do.

THE COURT: I told him to start from the beginning, just as we do in the Bible.

BY MR. WALKUP:

Q Let me ask you, sir, to assume, even though you may know these things to be so from your file there, that the particular vehicle -- first of all, let me back up.

In connection with preparation for rendering opinions here, have you been furnished certain material

relating to the Lane accident?

A Yes.

Q Let's start there. Okay.

Does that include the on the scene photographs of the truck and the locale of the accident which are here in evidence? And we are not bothering to get the number. I am referring to the photographs that are part of your deposition taken in Los Angeles.

A Yes.

Q A number of photographs of the scene of the accident, right?

A That's correct. A That's correct.

Q A number of photographs showing the vehicle at rest and the scene of the accident and related matters. You've seen that.

A Yes.

Q All right. Have you received and studied the Pitman Polecat brochure, such as this Operation and Maintenance Manual, which is Plaintiffs' Exhibit 15 (indicating)?

A I have.

Q And have you studied thephotographs of the vehicle and its parts involved in this accident taken by Robert Ehrlick of Stevens Institute?

A I didn't know who took them. I've seen photographs,

however.

Q These large photographs here which are plaintiffs' series 80 and various letters (indicating).

A Yes.

Q And have you also studied five Polaroid views of a pole-type pole trailer, which is another plaintiffs' exhibit, showing various views of the trailer?

A Of the pole trailer, yes.

Q And have you studied the diagra of the police officer, of the New Jersey police, who investigated the Lane accident, an enlargement of which is Plaintiffs' Exhibit 1A here in evidence, I believe?

A Yes.

Q And have you also studied the blueprint of the Pitman equipment, this hard blueprint which is Plaintiffs' Exhibit 102 in evidence (indicating)?

A Yes.

Q And have you also examined in your laboratory in Santa Monica, California, the door latch and striker plate, which is Plaintiffs' Exhibit 75 in evidence (indicating)?

A Yes.

Q And have you also examined here in court this exhibit which appears to be a door of a truck?

A Yes.

Q I can't see the number right handily but it is the only truck door we have here in court?

A Yes.

Q Have you also been furnished by me a summary of the history of the construction of the sub-vehicle as to what dates different parties worked on the vehicle, did certain things and delivered it to others?

A Yes.

Q And have you also looked at the right rear tire and rim of the sub-vehicle in your laboratory out in California?

A I did.

Q You tell me, sir, are there other things that you have studied and looked at relating to this event that I am going to question you about that come to your mind at this time?

A There's two exhibits over by the window or at least one is there that I saw this morning. I think both of them are there.

Q You are referring to the two models that were presented here by Dr. Ehrlich and I can't see the numbers

of them from this position? They are the only two models that Dr. Ehrlich presented.

Now, let me ask you to assume that this particular vehicle first went into actual construction at General Motors in Pontiac, Michigan, that is, the original chassis of it, back in November 1966, and at that time that it started out at the General Motors plant as a GM 75-- truck chassis with rear dual standard truck 10 by 20 tires and tilt cab 4-man seat and a Colman front axle.

(Mr. Reardon conferred with Mr. Walkup.)

Q Pardon me, Eaton, I am sorry, I will correct that to an Eaton fron axle.

Thank you very much, Mr. Reardon.

And that thereafter in approximately February of 1967, around February 17, that General Motors shipped that particular chassis which I have described to a firm called Hendrickson in Butler, Indiana, for certain modifications, and that the modifications performed by Hendrickson starting in approximately February or late February of 1967 consisted principally of changing the front drive axle to a Colman axle, which would be a front-wheel drive axle; substituting to the standard tires with the duals that I mentioned super single balloons with the dimensions of 18 by 22.5 off-road tires, and the appurtenances that went

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with that change.

That thereafter Hendrickson shipped the chassis from General Motors as modified by Hendrickson to Pitman Manufacturing Company, and this was in approximately March of 1967, March 8th to Pitman at York, Pennsylvania, and that the chassis as modified was received by Pitman and that Pitman thereafter installed, over a period of time, the superstructure which shows on the vehicle and I will ask you also to assume that until the vehicle was painted with the Jersey Central Power & Light logo on it, the name, that it had the appearance as shown in Plaintiffs' 64-G which you have seen, and I think we produced it out of your file.

And thereafter, after the vehicle was finished being painted and so forth, it was delivered to Jersey Central Power & Light from Pitman on June 2nd, 1967, that thereafter on July 3, 1967, General GMC Sales at Bradley Beach did some work on the rear springs which consisted of reinforcing them and raising the rear end of the truck approximately two inches so it would be level, and to correct a sag in the rear.

That on July 7, 1967m General GMC Sales at Bradley Beach worked on the vehicle's center bearing which was being rubbed upon by the dropping of the front

member of the vehicle, on July 26, 1967, General GMC Sales replaced the rear propeller shaft of this vehicle, and that the last three items were all done under the General Motors warranty, and that the vehicle then went into substantial use for the Jersey Central Power & Light Company as a utility line vehicle; and was used as such for a period from the date of approximately July of 1967 up until the date of the accident.

Asking you to assume that to be so, and have you also studied one photograph that has not yet been introduced in evidence but which was identified at your deposition as Plaintiffs' 64-F, which is a rear view of the vehicle sitting in a field or a wooded area, and bearing the same license number as the vehicle involved in this action. I am referring now to this photograph, sir.

A Yes.

Q Does that appear to you to be the same vehicle that I have been talking about?

A Yes.

MR. WALUP: I will ofer this as the plaintiffs' next exhibit. It has a number.

MR. REARDON: Would counsel suggest when that was taken and by whom? We have asked that on prior occasions.

MR. WALKUP: I know and Mr. Hirschhorn has

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attempted to find out on prior occasions.

MR. REARDON: I object, your Honor.

MR. SCHWAB: I object. A proper foundation has not been laid.

MR. WALKUP: Let me try to lay some more foundation.

Q From your study of the other photographs, does this photograph which I have here appear to represent to you just another view looking at the back end of the vehicle head on after it had been in the wreck?

MR. REARDON: Your Honor, I don't think that question would aid thebasic problem. I think the photographs that Professor Ehrlich has put in evidence he indicated he took on September 25, 1970 on the premises of Pitman. Unless counsel is prepared to say or this witness is prepared to say that this photograph represents that vehicle as of some occasion prior to that, I don't think it is admissible.

THE COURT: I will sustain the objection. If you really think it is important, there is a means of allowing an interruption of the witness to get testimony, if there is a witness available to indicate it represents a reasonable likeness of the condition of the back of the vehicle at or about the time of the accident or immediately

thereafter.

MR. WALKUP: I am pretty sure because of your Honor's commitment this afternoon that we will have some time to work on this, so I won't pursue it at this point and I will pass on to the next subject.

MR. REARDON: Your Honor, so that there is no question of anybody's surprise of counsel, this is a matter that has been the subject of inquiry by defense counsel for some months, where these photographs were taken and when.

MR. WALKUP: And it's been a matter of inquiry on our part, your Honor, also.

THE COURT: Of course I don't think that is really the issue as to whether or not it is admissible. The issue is whether anybody who is familiar with the vehicle in question will testify that that is a reasonable facsimile of its condition at or about the time of the accident. It doesn't make any difference who took it or when it was taken.

MR. REARDON: I agree.

MR. WALKUP: Yes.

THE COURT: We are in agreement on that?

MR.WALKUP: Yes, your Honor.

MR. SCHWAB: Generally, your Honor.

MR. REARDON: Generally.

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THE COURT: Well, specifically you can object if you like to.

Q One other thing that I neglected to ask you about:

Did you also receive in this connection the General Motors brochure about the 7500 series truck which I believe is one of your exhibits and I'd like to borrow it momentaily.

MR. REARDON: Handing you GM's Exhibit 92.

Q Are you familiar with this GM tilt model General Motors literature?

A May I see it for a moment a little closer?

THE COURT: Show it to the witness, please.

(Exhibit handed to the witness.)

A I don't recall having seen this particular brochure but I can see what it relates to.

Q All right, I will give it back to counsel and put it back in that envelope.

Q I am going to ask you to assume, additionally, that between the date of delivery of that vehicle to Jersey Central Power & Light and the date of the accident, February 4, 1970, that vehicle ran up close to 12,000 miles on it, slightly under 12,000 miles, and that during that period of time various drivers and riders in the vehicle

observed that it -eemed unstable or top heavy; that it had a tendency to excessive side sway; that it had unusual ride characteristics compared to a tandem rear axle truck, and on occasions felt like it had a tendency to tip on uneven terrain.

Now based upon the material that you have studied and upon the facts in the hypothetical question, and your knowledge and experience, do you have an opinion as to the cause of the riding characteristics of that vehicle which I have just described, assuming for this purpose that that is the condition which it presented to the riders?

MR. REARDON: May I --

THE COURT:I will hear you first, Mr. Reardon. You rose first.

MR. REARDON: I guess I am premature, your Honor, but I wanted to get up before Mr. Schwab. I guess the question is does he have an opinion. The answer is obviously yes. I object to the opinion.

MR. SCHWAB: I object also, your Honor.

THE COURT: Objection is overruled.

Q All right, Mr. Reardon has answered for you so would you just --

MR. REARDON: Well, I didn't want to get up

gain.

MR. SCHWAB: Do I understand the Court has ruled therefore on the qualifications of the witness in all respects, your Honor.

THE COURT: At least as to this question. We meet each problem as it arises if you gentlemen have objections. The objections are overruled as to this question.

Q Do you have an opinion?

A Yes, I do.

Q Will you state what your opinion is?

A Yes.

The unusual handling qualities on this particular vehicle speak to the location of the center mast which appears to be excessively high. The tread for the rear wheels which appears to be excessively limited, meaning small.

As primary considerations to --

MR. REARDON: If your Honor please, may I approach the bench on this for a moment?

THE COURT: Surely.

Come up, Mr. Schwab.

MR. SCHWAB: I certainly am, your honor.

(At the side bar.)

MR. REARDON: I don't recall the precise words

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the witness just used but he said the width of the tread, your honor. Now I construe that to mean the dimension of the rear axle from one tire on the outside to the other tire on the outside. The only basis for that testimony in the record so far is Mr. Walkup's offer of that photograph which was not received. So I don't think there is any basis for him giving an opinion based on the tread.

MR. WALKUP: He's seen other photographs, some of which show the same thing. This just shows a better view of it. I will show you another photogrpah. It is very similar. That is in evidence.

MR. REARDON: Are you telling me that he didn't rely on that photograph in his opinion?

MR. WALKUP: I thinkhe relied on it in part but I dont think he is limited to that.

MR. REARDON: Sort of a difficult thing to deal with, your Honor, with a hypothetical question of this magnitude. I do think --

THE COURT: If you think that is important, why don't you cross examine him on it?

MR. REAREDON: I shall, your Honor, but I think some damage may be done if the jury already hears the conclusion in answer, the naswer not having any basis in the underlying materials in evidence or the basis for the

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hypothetical It is kind of a cumbersome way. It is hard to protect yourself on this kind of question. He threw in a mass of material, and now we get an answer back, we don't know what he is relying on and wasn't relying on.

THE COURT: That would be a matter for you to cross examine him on. I will allow it.

MR. SCHWAB: I object to the quality of the witness' answer, your Honor, where he says something appears to be this or appears to be that.

THE COURT: Isn't what the witness originally stated that it is just an opinion with reasonable certainty? I will take the answers.

(In open court.)

MR. WALKUP: Could we have the answer read back,your Honor,as far as it went?

THE COURT: Yes.

(Last answer read.)

Q Would you continue that?

A And the location of the principal load behind the rear axle, which places it -- places the longitudinal center of gravity rather heavily loaded aft or rearward.

Q Would you explain the various elements of that answers in lay terms?

A Sure. Thinking in terms of, first, the

elevation of the main load, to the extent that the principal weight being carried as characterized in this truck primarily by the book being carried more or less on the deck rather than well down to get its mast down as low as possible, that provides a relatively large weight at an elevation that makes for ease of tipping while cornering.

With respect to the rear duals, because utilization of the full potential width for stability, there has been terms such as wide track, things of that sort, that implies increased stability because the tires have been moved out to provide a more stable basis.

If they are moved in, other things being the same, the vehicle obviously is more easily tipped, and that is what we see here.

In going to the flotation tires for reasons unknown to me, they were moved inward instead of bringing them out to the full width of the vehicle; and there are devices for bringing them out.

By having them inward, it makes the vehicle more readily upsettable.

And short of upsettable, it makes it have a feeling of instability during minor changes, for example, lane changes, things of that sort. Where the average vehicle responds in a manner that we are accustomed, this

particular one has been characterized in the hypothetical, appeared to respond in an unstable or give the driver an uncomfortable feeling in the manner in which it responded.

Then the last aspect has to do with the load being substantially behind the rear axle, and a very prominent load at that, and what that does is accentuate, almost like a hammer-like effect,and as you are moving along with this weight at the end, these changes tend to be amplified because of the substantial weight located substantially behind the rear axle.

So these things collectively, actually singly but collectively do produce a difficult to handle, certainly more difficult to handle vehicle than if all or some of those factors didn't exist.

THE COURT: Mr. Severy, if you don't mind, there is one answer you gave I would like some clarification on.

You were talking about the location of the boom and I think you expressed the opinion that it should have been lower down. Is that what you said?

THE WITNESS: I did, your Honor.

THE COURT: Lower down where? That is what I don't understand.

THE WITNESS: I understand. In some boom installations, the hardware that manipulates the rotation

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of the boom is welled or sunk relative to the chassis to bring the entire mast, even the horizontal portion that is strung out ahead of the truck, or if it is a front mount behind the truck, if it is a forward mount.

And by weilling the mast area, the mast being the perpendicular portion of the boom, which as stored is the horizontal, that can be manipulated around, by welling it we get it downto a lower level and that means the trunion on which the horizontal portion operates is also lower and that brings the entire weight of the structure down to a lower level.

And this consideration was not included in that particular design, so that --

MR. SCHWAB: I object. The witness can't possibly know what was or wasn't included in the design.

THE COURT: He is explaining his opinion. Is that right?

THE WITNESS: Yes, your Honor.

THE COURT: Now I will let him answer. Go ahead and finish your answer,please. Give the witness his sentence read back to him, what he was answering.

(Read.)

A So that the weight that is being carried, which is the purpose for the truck, is operating at an elevation

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substantially higher than it needed to with design considerations if they had been included.

Q You used the term design in your answer in the last two instances. Are you in your answer then relating these things to the design of the vehicle?

A The vehicle was designed ahead of the installation of the Polecat or crane system; and I am referring to the installation of the crane and the manner in which it was installed.

Q On that same general subject, I will ask you to assume that Pitman, who put on this superstructure, had not previously mounted a PC 6 Polecat on this type of modified chassis with the modifications that have previously been described and which I woulnd't bother to bother you with repeating.

Do you have an opinion as to whether, in adding the part which Pitman added, engineering and design practice would require any consideration of the performance of the completed unit?

MR. SCHWAB: Objection.

THE COURT: I am not sure I understand the question.

MR. WALKUP: It is a little cumbersome. I will try to reword it.

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Q Assuming that Pitman had not, before this installation, had occasion to mount a PC 6 Polecat on a chassis of this configuration which we have described, do you have an opinion as to whether or not good design practice would require any engineering studies to be made?

MR. SCHWAB: Objection to the form, to the substance and to the witness' qualifications.

THE COURT: I will allow it.

MR. REARDON: I take it this is only offered against Pitman?

THE COURT: Yes. You may answer.

A Were you finished, Mr. Walkup? I wasn't sure that you were.

Q I think with that.

A I can anwer with that, but in connection with an installation of this nature that we are referring to, the Polecat by Pitman and onto the chassis by GM, if this had not been done previously, and therefore the response handling quality of the vehicle evaluated then it certainly ought to be evaluated before released to the public for the obvious reason that it is a new entity, and its qualities of handling on the highway or off road, even for the function in which it was designed for lifting, and the interactions of that with the vehicle,

certainly should be studied in actual tests for the purpose of determining whether hazards exist that may not be clear just from the drawing board evaluation.

Q Do you have an opinion, based upon previous information given to you and what you have studied here, as to whether or not the chassis which originated with General Motors and then was modified and eventually shipped from GM to Hendrickson, so I am talking about the chassis with its modifications that arrived at Pitman, and which I wouldn't repeat all the details about again, whether that particular chassis as modified was a satisfactory chassis upon which to mount the Pitman unit.

MR. SCHWAB: May it please the Court, now I assume that that question is being addressed to General Motors as distinguished from Pitman.

MR. WALKUP: I think that is addressed to both.

THE COURT: I think that would go to both.

MR. SCHWAB: I see.

A Yes, twhe chassis as modified might be -- it was not a satisfactory entity and the reason being it constituted the use of the flotation tires, which were mounted inboard or more narrow tread than what was available in the dimensions of the vehicle.

Additionally, in place of two tires, one was

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substituted, and under certain conditions, that decreases -- it is almost like the paratrooper who decides to go without a spare shoe. He's compromised himself if he's in trouble.

MR. SCHWAB: Objection. I move to strike the analogy of the paratrooper.

THE COURT: That is descriptive of his own opinion and I will allow it to stand.

Q Do you have an opinion based upon your familiarity with the practices in the industry, and your knowledge and experience as you have told it to us today, as to whether General Motors should give consideration from the standpoint of designing or engineering the chassis as to what superstructure is subsequently going to be put on that chassis by the person who puts on the superstructure?

MR. REARDON: Objection, your Honor.

THE COURT: Better try that one again. Objection sustained.

MR. WALKUP: All right.

I will try to try it again.

THE COURT: I am going to suggest, as I told you, that we would adjourn about twenty after three, so if you have something to go to in the next five minutes do it and then you can think about this overnight and you can work

it out.

MR. WALKUP: I just don't want to ask it again the same way.

Q Let me do this, and I am going to the door latch system now, and you have told us about your background of bing on the door latch committee.

First of all, let me ask you just one real simple one:

Do you know how many stages there are in the latch that is the exhibit here in evidence? Can you tell us? Do you know?

A In terms of degree of open or closed?

Q Yes. How many different positions are there?

A Three.

Q Are are the three positions positions?

A Well, the latch is open, or it is on second area, which is when the door is sort of ajar and you might hear the rattling, or primarily when it is fully latched.

THE COURT: Incidentally, before Mr. Schwab gets up, this is being received only as against General Motors.

Q Are you familiar, from your experience, as to the term "anti-burst" or "safety latch"?

A Yes.

Q Could you tell us first of all, is the latch

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which is here in evidence in this box -- and I don't have a good memory for exhibit numbers -- 75 -- is that what is called an "anti-burt" lock or a "safety latch"?

A No, sir, as installed, it is not.

Q What do you mean by that "as installed it is not"?

A Well, a latch as installed will function differently depending upon the equipment it is installed in, and the manner of the installation.

A latch for a small vehicle is not satisfactory, necessarily, for a larger vehicle.

The reason is that as we expand the volume, the cabin volume, the potential for torsional longitudinal changes increases. The difficulty of creating a stiff cabin environment, meaning limiting this torsional longitudinal yielding increases, which means that we have got to beef up the structure.

Characteristically cab doors are unbeefed, they are lightened. Some of them are little more than a bird cage in that they are just a shell around the driver.

MR. REARDON: I move to strike that out, your Honor.

THE COURT: Strike that part out.

A Consequently, as we vary in size, the quality of the latch has to be commensurate with the structure in

which it is being installed; and the other factor has to do with the inner acting agencies of that particular latch, the striker, and whether it embodies such things as limitations for longitudinal movement, either through the constraint of the door jamb or through wedge blocks, other vertically limiting devices; that actually limits movement vertically, and other devices that limit its movement horizontally or longitudinally.

Because what happens otherwise is that that latch becomes overstressed for the conditions under which it is operating, under an environment that should only produce a nominal stress.

In other words, if all of the features necessary for a latch are not incorporated, or that particular latch is not made sufficiently strong for the environment that it's placed within, then its performance is going to be sub-minimal compared with what it could have done if more had been done for it.

THE COURT: Mr. Walup, if you are going to put another question that will require a long answer --

MR. WALKUP: I will be delighted, your Honor, to desist.

THE COURT: All right. Members of the jury, we will take our adjournment for the day and as I told you

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tomorrow morning we will start at 10:15 insead of 10 o'clock session.

I explained, be prepared to sit about 1:15 or 1:30.

Good night.

Good night, counsel.

(Adjourned to Tuesday, March 5, 1974, at 10:15 a.m.)

DAVID LANE

vs.

GENERAL MOTORS et. al.

March 5, 1974,
10:15 a. m.

Before:

HONORABLE EDWARD WEINFELD,

District Judge,
and a Jury.

Appearances:

Mr. Walkup,
Mr. Hirschhorn,
For the Plaintiffs,

Mr. Reardon,
Mr. Barrett,
Mr. Schwab,
For the Defendants.

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TRIAL CONTINUED:

(In open court, jury present:)

DERWYN M. SEVERY, having been previously sworn, resumed and testified further as follows:

DIRECT EXAMINATION (continued)

BY MR. WALKUP:

Q Mr. Severy, with reference to your work on the S.A.E. door latch committee, did the door latch committee actually publish reports and design data and test data for door latches?

A. Yes.

Q. That would be in the S.A.E. Journa; is that correct?

A. Yes. With respect to your statement on design data, it wasn't the intent of S.A.E. to dicate design but to dictate testing procedures and performance.

Q. Have you in your experience tested door latches on various vehicles for effectiveness and for design characteristics?

A. Yes, I started that program about 1956.

Q. Then will you tell us please what type of door latch system and locking system there was on the subject truck involved in this accident?

A. Yes, this is known as the old style latch which did not incorporate the anti-burst feature.

Q. Will you show us what features it did incorporate in the door itself, the latch itself, to make it work?

A. Well, do you wish to have a verbal description or use of --

Q. Verbal. We have already had some demonstrations.

A. All right, fine. The latch has a three-stage position or sets of positions, three stages, the open, secondary, and primary positions, and the latch is mounted in the door and the striker is mounted on the B post or door post This is standard for most vehicles. As the door is closed,

the striker is engaged, and the latch pawl contacts in sequence the striker detents for the different -- the two positions of closure.

There is about a one-eleventh of an inch end plate -- it's a partial end plate -- which would serve as a longitudinal constraint. That end plate would tend to prevent -- may I approach that particular -- I think it would be easier to illustrate or to speak to it.

(The witness left the stand and testified before Plaintiff's Exhibit 73.)

A. Referring to Exhibit 74, I had spoken to the end plate, which is about aone-eleventh of an inch thick. It's a partial end plate in the sense thatit comes up in a cantilever manner to engage the striker tooth in the back of it, and the purpose is to limit longitudinal movement.

One of the difficulties with this type of procedure is that there is not a chucking arrangement, meaning a lock-in arrangement for this configuration to utilize -- to make use of the longitudinal constraint or end plate that I had mentioned.

The other problem is that the end plate is a thin section; for example, a quarter inch is a mount that is generally -- that is .25 versus something like .09 or something of that order, in terms of thickness. That's normally used in periods of the late fifties and early sixties, indicating that

substantially more massive end plate is used to prevent deflection and, because it is cantilevered, it can have this effect; and therefore, a more massive structure is more rigid against that effect.

Without the chucking, as I indicated, or vertical constraint, for example, this shroud has a 90-degree angle. It wasn't utilized, however, because the corresponding portion on Exhibit 75 matching upper striker portion has been provided with a ramp. If this area came out perpendicularly, then as the latch slammed into the striker, it would have underneath it a shelf that would limit movement in this direction.

Now, movement in that direction takes place because although if you were to look at this door installed it would appear as a solid material, actually structurally it's not a solid material. It's made of sheet metal that, under the conditions of even nominal force, this does -- you can almost think of it as alive. If you had high speed cameras looking at it you would see rhythmic action on doors, as I have shown in some of my movies. They flutter, they move, they pulsate.

And in doing so, and with devices such as I had clear back in 19 --

MR. REARDON: I object, your honor, to what he says he had back in 19. I don't think that is permissible.

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THE COURT: I will allow him to answer that.

THE WITNESS: I am sorry, your Honor?

THE COURT: It's historical background. You may answer.

A. Yes. In terms of devices for instrumentation that I had back in '57 which were what I call scribe recorders, and they were on the principle that's used in laboratories often of a kymograph which is a stylus-like recorder that, as the door moved relative to the jamb, this little recorder would actually describe the path of such movement, and this enabled us to appreciate the fact that there was interactions going on even if the door didn't open.

We put them also on the latch and the rods and found that there was inertial action.

Now, inertial actions in a door latch that is operating during an impact means that as the forces develop within the door system ltse,f the weight of the various components does act to either open or close, depending upon design, the particular latch; and we found that because of the weight of certainhandles and the manner in which leverages were arranged, we were getting self-opening actions in the late fifties and in our door latches, and that led to the S.A.E. developing recommended practices and design having the effect of obviating that particular problem.

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Now, going back to this movement, by providing a ramp rather than a squared off shoulder to butt against the shroud, what happens is that as the movement vertically takes place, the ramp cams, acts as a cam or inclined plane to force longitudinal displacement.

So even if the stresses within this particular system, and they do operate, incidentally to pull doors and door jambs apart, but even if they were not sufficient, the vertical jolt factor can augment the longitudinal -- normal longitudinal strain, strain meaning movement as opposed to stress, the forces that cause that movement, sufficient to separate this particular latch, so that what should have been a normal jolt to this system was sufficient to disengage the latch from the striker because of the inherent design of two features that are working against keeping that closed.

One has to do with the retention of the mating portion that goes into the latch to engage the latch. That is on secondary, and if we move it in further, we get into our primary position. We have an angle that is just a little over 100 degrees, and this means that it represents an inclined plane of about 50 degrees on one side -- it's around 48 and a half -- and the other side alittle more than 50, and of course the corresponding ramp area in the latch.

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So we have a ramp that dissociates the two with forces on the lateral, meaning tending to open plane, and then we have a ramp vertically that dissociates on the longitudinal and that combination actually is a built-in design feature that facilitates door opening rather than attempting to stop it.

Q. With reference to the plates which are on the top of the door here where I am point, about eight inches in, and the other spring-loaded device down at the bottom, what part are they supposed to play in this latch system?

A. Well, If these -- these actually are anti-rattle, and alignment, door closure alignment plates, as the door slams or is shut closed, any misalignment is brought into a reasonable alignment so that the surfaces of the latch and striker make a reasonable contact for closure.

So they warp the door into position if the door is not properly aligned.

Then, additionally, after the door is closed, one one of these two -- I think it's the bottom location, on the bottom location -- there is a spring-loaded wedge, and the purpose of that is to continuously apply wedge-like pressure to take up the slack in the door, andit's an anti-rattle device.

In addition to those devices, and anti-rattle devices are important just for comfort -- if there was a vertical

retention plate at the latch for this nominal impact of rolling over, this,even this particular latch would have held, I believe.

The reason is that this system has not been exposed to the kinds of exposure that we run into such as intersection collisions where even a passenger car striking a truck can develop very high torsional forces where the front end is bent around from the impact, and that draws out, elongates the latch system.

And this light weight shroud support for longitudinal restraint would unquestionably show then under those conditions some deflection.

In this particular one, the alignment appears to be about normal, meaning that in terms of verticalness, meaning that this door open without actually having to strain the shroud,cause of the two-cam effects that I have described.

In other words, if this could have been held in position, enough to load up the shroud, the door may have stayed closed, but because of this action it wasn't able to.

Q All right, thank you. Are you familiar with the type of latch which we referred to or has been referred to as anti-burst latch or safety latch?

A Yes.

Q with reference to the state of the art of that particular device, its availability in both passenger cars

mb9



and truck?

A. Yes, I am.

Q. let's take passenger cars first. When did the anti-burst type of lock first come into use in passenger cars under the state of the art?

MR. REARDON: Objection, your Honor. I don't think it's relevant to the issue here.

THE COURT: Yes, confine yourself to trucks.

MR. WALKUP: All right.

Q. May I ask one preliminary question? Are the principles the same in passenger cars as trucks in the anti-burst lock?

MR. REARDON: Objection, your Honor. I don't know what taht means, very frankly. I will object to it.

MR. WALKUP: I will reword it if you don't know what it means.

Q. Does the anti-burst lock on a truck work on the same principle, general principle as the anti-burst lock on an automobile?

MR. REARDON: I object, your Honor.

THE COURT: Overruled.

A. Yes.

Q. With reference to trucks, can you tell us when in the state of the art such anti-burst locks were avaiable on

various makes of trucks?

A. Yes.

MR. REARDON: May I ask if counsel means available or in use?

MR. WALKUP: In use.

A. Well, yes, I can answer that.

Q. All right.

A. That, for example, I have a 1962 Ford F250, and it has anti-burst lock on it. WE have it at the laboratory because we ran a rollover test with it.

The chrysler products,had a '63 Dodge truck that I was running some handling tests on, and that particular vehicle also had an anti-burst latch.

As to whether it had it several years before, I hadn't researched that, but '63 the Chrysler products definitely had it.

Q. When was the anti-burst latch originally developed?

A. The first that has come to my attention was about 1954 in the -- used in the United States.

Q. With reference to the anti-burst lock,when it was used on vehicles to replace the older type, were studies then made in a scientific manner as to the effect of the anti-burst lock as to cutting down or changing the incidence of door openings and collisions?

MR. REARDON: I object, your Honor, unless we are talking about studies relating to trucks in the application of this type of locking device.

THE COURT: I will allow counsel to develope whether there was a general study pertaining to vehicles. I don't see that necessarily it has to be confined to trucks qua trucks as distinguished from vehicles. I will allow the question.

Q. I will then reword it to include vehicles.

A. Yes, the studies actually followed several courses. One has to do with laboratory studies. I have run many tests in which we use these rather giant size tension failure analysis machines that measure rather accurately the load being applied to a structure, and I have used them for purposes of pulling different latches apart.

I had a sub-project of my activity going on in, I think, around '59 and '60, in which I tested these latches and found that modifications could be made to the -- even the anti-burst latches to in some instances more than double performance, meaning that by just looking a little closer into the design, perhaps in one instance a rotor slips, and so by putting in a more effective weld, twice the load could be sustained.

Then another series of tests that I conducted and has been also conducted by other researchers in the United States had to do with a full scale crash test, and in that regard,

in particular, the intersection collision in which the exposure to upset is rather large, particularly on earlier vehicles.

I was able to get some additional information on the mechanisms of door latch failure and published that information.

And then statistically, in our institute, we did an analysis of 10,00 accidents that were sustained in a period of, I think, three years, and that information assisted also on door failure from a statistical point of view.

There are studies done by other universities in that regard which rather clearly established --

MR. REARDON: I fyour Honor please, I respectfully --

THE COURT: I think he is wandering on this.

MR. REARDON: -- I respectfully object, your Honor, and move to strike any reference to studies. The best evidence of studies are the studies, and I should have a fair opportunity to know what the man is talking about.

THE COURT: Strike the latter part of it.

Just bear the question in mind and please answer it.

THE WITNESS: Yes, your Honor.

Q. Let me show you here Plaintiff's Exhibit 76, and do you recognize what type of latching system that has?

A. Yes, this is an anti-burst with a mushroom type striker, and full capture system. This one is present in

vehicles starting about 1964;Chevelle, I believe is the first that I recall seeing, and then I think in '65 the Corvair had it.

This was developed by General Motors. Very good system.

Q. All right. What's good about it?

MR. REARDON: Objection, your Honor.

A. What happens is that --

THE COURT: I didn't hear.

THE WITNESS: Excuse me.

MR. REARDON: I object.

Q. Explain your answer as to why it's a good lock.

THE COURT: Objection sustained. Reframe your question.

Q. You said it was a good system. What featur-s of it areyou referring to?

A. Yes. One feature has to do with the complete encapsulation of the mushroom head bolt so that it provides the dual feature of retention regardless of movement in any axis. In other words, it doubles for not only the device that is retaining for lateral or opening effect, but it limits vertical movement at the same time.

Q. You have already indicated thatyou studied the latch and the striker, and they are in evidence here, and I am going to ask you to assume that that latch was actually physically cut out of the door which is here in court by severing the

metal by a Dr. Ehrlich at Stevens Institute, and under those circumstances, do you have an opinion as to whether that was the latch that was in there at the time of the accident?

A. Yes, that would certainly be consistent with being the same one.

Q. Having examined the striker plate, do you have an opinion as to whether that was the striker plate that was wroking in conjunction with the latch system at the time of the accident?

MR. REARDON: Yes or no, please, your Honor.

A. Yes, I do have an opinion, sir.

Q. What is your opinion?

MR. REARDON: May I have a voir dire, your Honor?

VOIR DIRE EXAMINATION

BY MR. REARDON:

Q. Sir, are you indicating by this answer that you have an opinion that the striker is actually the striker of the type that was used on this particular vehicle?

A. That and more too, yes.

Q. As to the "and more," to begin with there is no dispute by anyone that I know of that this striker of this kind was on this truck as it left General Motors. Let me assure you of that. What I am asking you now about is the condition of the striker as it exists today. Okay?

A. Yes.

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Q Confining myself to that, do you have any knowledge as to whether or not the striker which is in evidence, I think as Plaintiff's 75, is in the same condition now as it was immediately following the accident on FEbruary 4, 1970? Do you know?

A Well --

Q Will you answer yes or no, if you can, sir?

A Well, I can answer that I don't but I'd like to explain. There could -- may I explain, sir?

Q Well, sure.

A There could have been some minumscule modification of that particular striker that wouldn't mean anything to me. The reason that I -- then I have a reason why I feel it's the same, and if that's not responsive, I will wait till such question.

Q Let me tell you this: I am not suggesting that anybody intentionally tampered at any time with the striker or the latch, okay? I want you to understand that. My question relatesl to any physical appearance you might observe at the time that striker came into your possession. Do you have any way of knowing whether that physical appearance existed in that form immediately following the accident? If you can answer that yes or no, fine.

A Yes.

Q. You do know?

A. Yes.

Q. That is because of some indication on the striker?

A. Yes.

DIRECT EXAMINATION (continued)

BY MR. WALKUP:

Q. What is the indication on the striker?

A. The wear pattern correlates in location --

THE COURT: Pardon me?

THE WITNESS: EXcuse me, your Honor. The wear pattern --

THE COURT: Wear pattern?

THE WITNESS: Pattern, yes, your Honor.

A. -- correlates in location and nature to that of the latch.

Q. What are you talking about? Illustrate to us what you mean by the wear pattern.

A. Yes.

Q. If you want to, as other experts did, of course with permission, stand closer to the jury, to show them that.

THE COURT: Yes, you may.

MR. WALKUP: I would ask that he do that.

(The witness testified in front of the jury box.)

A. First, I'd like to point out then, referring to Exhibit 74, there is a wear on the internal side of the

shroud. I think probably it would be best to take a pen to point to that.

Q. Maybe if you would get a little more to the center of the jury.

A. I will just walk along with it, but I am pointing to the inside edge of the shroud which has been eroded by continual opening and closing of the door.

MR. REARDON: It is indicated by something like a brown mark there?

THE WITNESS: Yes.

MR. REARDON: Is that a fair statement?

THE WITNESS: Yes, it does seem to have a little brownish tinge, but mainly the wear. You see, you can compare the width of the shroud in other locations and you find it down to like a dull knife blade right in that location from repeated impact with the corresponding part of the striker which is the blade of the striker, the wedge I was pointing to before.

If you notice next that the impact portion, first of all, when you are closing the door, the striker initially contacts this pawl portion that I am pointing to now, and if you will notice as I walk about, it's been impacted in that corresponding location, repeatedly impacted right next to the edge, the shroud edge.

Then, as the secondary and primary systems are engaged, we look at what happens when this is just riding down the highway and it gets repeated stress, impact stress that does have an embossing quality to it, and we find that that is also over-biased over at the extreme edge.

Then we ask the question, well, looking at 75, if that were so, we'd expect to find, if this action is almost in misalignment in the sense that the striker relative to the latch is spaced so wide that it's actually erodeing the shroud, then it must be making some contac t to the under side edge. That's a little more difficult to see, but looking at 75, I think you can see that it's been not only polished but worn on the under side. I am pointing to it now.

Then I have examined comparable latch systems and found that when the impacts occur about central, that there is no wear to the under side.

Q. All right.

A. That concerns the alignment of that nature, and there are some other indications that this particular structure belongs with this latch.

Q. What are those?

A. That during the impact of the upset quality of this particular accident, this section of the door that embodies the latch and then the corresponding -- it's relationship to the

striker, did some rather substantial movement, asevidenced, for example, by the fact that even though in normal association they are wide apart, actually a little further apart from what I have shown because if it's closed, it has to strike and cam itself into alignment; and so it would be at least that far apart.

However, during the impact, it did sustain this kind of condition before it came open because this rotation bolt has been impacted onto the striker as we can see.

Q Is there a mark on the middle there?

A Yes.

MR. REARDON: may I see what you are point to, please?

THE WITNESS: It's here.

MR. REARDON: Would you describe it in the record, please?

THE WITNESS: The surface has been disrupted in the general area, and the geometry of that pin for the rotor onto the latch.

Additionally, I mentioned that in the vertical axis we get a camming effect, and if you will note that by rotating the shroud around you can bring it right into position with the mark that we see on the inclined plane; and in the examination of latches, even when the vehicle has been used for many years, I find no such marks.

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MR. REARDON: I object to that last portion, your Honor.

THE COURT: No, I will allow that as an explanation.

(The witness returned to the witness stand.)

Q. You have indicated that some trucks manufactured by certain manfactureres under the state of the art had anti-burst locks prior to he year 1966 when this truck started construction that we are involved with here.

Do you have an opinion whether an anti-burst or safety latch on the cab of a truck would have the same benefits over the old system as on an automobile?

A. Yes, I have an opinion.

Q. What is the basis of that opinion?

A. That it would allow for the same benefits, meaning that it would hold doors closed under conditions that doors are forced open, collision conditions, upset conditions, where impacts are relatively nominal.

Any latch system with a large enough blow will fail, any that we know of, and see, and are in use, even today will fail if the impact forces are high enough; but I am speaking about the relatively nominal impact forces, the type taht are associated with this particular accident.

Q. I am going to have to ask you a rather lengthy hypothetical question, and if you will bear with me, I have made some notes here, and actually I have given you orally

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this before, correct?

A. Yes. I don't know what you are going to say, but I have taken down some information yesterday.

Q. Let me ask you to assume the following:

That the truck and trailer which ahve been previously described during the testimony as shown in the photographs reviewed of the accident scene, having three off-road tires and oneon-road tire on the right rear, was northbound on February 4, 1970 on State Route 9 in New Jersey --

THE COURT: Now, I am sorry to interrupt you. YOu are looking down at that lectern and you are not raising your voice.

MR. WALKUP: All right, your Honor, I will do so.

THE COURT: Please start again.

Q. All right. Assume that the truck and trailer previously described and shown in the photographs reviewed by you of the accident scene and with three off the road tires and one on the road tire on the right rear, as shown in the photographs, was northbound on FEbruary 4, 1970 on State Route No. 9 in New Jersey, and that State Route No. 9 in New Jersey had the approximately lane widths and median barrier widths as shown on the police diagram in evidence which you reviewed.

And that the median barrier had a curb of six to eight

inches plus or minus, described as a standard curb.

I ask you to assume that the truck pulling the trailer was in the slow lane or outside lane as opposed to the inside or lane closest to the median; that the weather was cold and windy; that the road surface was ice with patches of snow on top, was extremely slippery, and was described as hazardous driving conditions.

That in the truck cab there was a driver, a middle passenger, and a right-side passenger.

That in the rear man cab there were three passengers; that the only lap seat belt in use by any of the six men was the center passenger in the front; that there were no lap betls in the back cab.

Assume that the road condition was as seen in the accident scene photographs which you have reviewed, and assume that the truck was pulling the unloaded type of trailer that you have been shown in the pictures yesterday; that the road had a slight downgrade; that the driver saw a light and traffic ahead, which intersection shows in the accident scene pictures in the direction the truck was proceeding, ahead of the truck.

That the truck was going 20 to 25 miles per hour; that the driver attempted to brake, attempting to slow down for the intersection; that at that point the vehicle went into an

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immediate right-side counter-clockwise skid at the rear and the front started angling toward themedian barrier.

That at the time the car or the vehicle started to skid, the passenger in the right front next to the door put both hands on the dash to steady himself, and that the center passenger wearing a lap belt and weighing 220 pounds, approximately, and a husky man who was a weight lifter and an athlete,reached over with his right arm and garbbed the right side passenger by the front of his jacket and clothing under his neck to steady him and to hold him from going out the open door; and that the front of the vehicle then proceeded to mount the curb with the left wheel mounting first followed almost immediately by the right wheel mounting the curb, proceeding across the median barrier, and at the same time the right rear end continued to swing counter-clockwise and seemed to pick up a slight amount of speed.

That the right rear tire and rim hit the median barrier, and that at that point the truck was partially over in front -- the front end of the truck was partially over into the other lane across the median; that at the time, at or about the time of hitting the median the right rear tire beads became unseated and a furrow was made across a portion of the median by the right rear wheel as the truck continued.

That the truck and trailer ended up in the position as

shown in the police officer's diagram with the front end in the southbound lane; and that about the time that the right rear wheel hit the curb, the truck started to tilt to the right and went over rather slowly and fell in a slow manner.

That at about the time the rear hit the curb on the median and the truck was tilting to the right about 20 degrees, a loud noise, popping sound, was heard at the right door, and at the same time the door was noted to pop open or swing open.

The truck then continued to fall on its side and landed in the position shown in the photographs of the scene and in- the police diagram.

That the righthand passenger heard the noise and saw the door go open; that this door had been locked by the passenger on the right at the start of the trip by pushing the inside handle to the lock position of the door; that the right passenger's feet then went out the open door, and his upper torso was restrained by the hands of the center passenger holding him and by his hands on the dash; and that he did not fly up and injure himself against the windshield, and that he did not fly up and hit the roof of the vehicle; that he had no cuts, bruises, or scars on his head or shoulders.

That as the truck turned over, his legs were trapped

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out the open door and the truck continued to roll onto its side; that the right passenger then ended up in a jack-knife position bent clear forward with his feet pinned by the ground and his upper torso forward in a jacknife position with part of the truck against his back, and he received abruise to his scapula or wing bone.

That the right passenger remained trapped in such manner until the truck was removed within approximately half an hour; that he had bruises and abrasions on his lower extremities, and that in that position where he ended up, he observed that he had no feeling in the lower part of his body, and that ex-rays taken of him subsequently showed that he had received in the accident a wedge type marked compression fracture of his twelfth thoracic vertebra and a dislocation of the twelfth on the leventh; and that the compression fracture was downward in the front part of the vertebra.

I ask you to assume further that no other occupants of the vehicle, including the five men, had any injuries other than being shaken up and bruises and contusions on some of the men; that they in the back seat fell to the right one on top of another and ended up in that position; that the right man can door remained closed, and that the driver held onto the steering wheel, and that the man in the mddle

eventually released his seat belt and part of his weight at that point went onto the right-side passenger.

I ask you to assume further that the Chance equipment was substantially destroyed in the accident and was sold for salvage for $800 plus or minus; and to assume further that the Pitman Polecat unit on top and its attachments were damaged but were repaired and later remounted on another chassis and returned to use as repaired.

Bearing in mind all of those facts, I am going to ask you several separate questions, and the first one is:

Do you have an opinion as to the posture of the right front door when the truck was falling onto its right side after the door had popped open?

A. Yes, it would have been nearly at right angles, could have been just a little bit short of going to the right angle condition providing there was enough rearward movement as the vehicle swung around to lock it into that condition as it rolled over.

Q. What is the basis of that opinion?

A. Because of the manner in which it was crumpled forward rather than having a contact that would slam the door closed.

Q. Do you have any opinion as to the physical forces involved in the collision ascribed first to the truck? Just

yes or no.

A. Yes.

Q. Secondly, do you have an opinion as to the physical forces involved in the collision ascribed to the occupants of the truck? Yes, or no.

A. Yes, I do.

Q. Have you prepared a diagram which you presented at your deposition in Los Angeles which would be of assistance to you in explaining the two opinions last mentioned?

A. Yes, I have.

Q. That has been marked as Plaintiffs' Exhibit N for identification, and consists of two parts actually, a basic drawing and an overlay.

Would that be of assistance to you in explaining your opinion to the Court and jury?

A. Yes.

MR. WALKUP: May we have it in evidence then at this point?

MR. REARDON: I have no objection.

MR. SCHWAB: Well, I would liek to find out, your Honor what this diagram is supposed to represent. In other words, if it's just for illustrative purposes and not claimed to be to scale, and not claimed to be a necessarily precise

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reconstruction of the accident, I expect I would have no objection. If it's being received in evidence for anything more than that, though, then I think we would be entitled to a voir dire and I may very well have an objec tion.

MR. WALKUP: I will stipualte, your honor, that it is being introduced solely for the purpose stated by counsel, for the purposes of helping to illustrate the opinion rather than try to get it in words.

MR. SCHWAB: Then I have no objection.

(Plaintiffs' Exhibits 64M for identification and 64N for identification received.)

MR. WALKUP: Could the witness step down to the board, your Honor?

THE COURT: Yes.

(The witness testified from the blackboard.)

THE COURT: Can the jurors see from there or is it adequate from thatpoint?

Go ahead.

Q Do you want this overlay mounted?

A No, it's all right.

(Pause)

THE WITNESS: May I proceed?

THE COURT: Yes.

Q Yes.

A I will attempt with a grease pencil to darken these areas. But what is shown, and I'll illustrate here because I know the difficulty of seeing that far, the vehicle is southbound and this is the Polecat truck, and it is shown in the curb lane, or outside, as opposed to the median. Here is the median in this location, the median lane, and the curb lane, shoulder (indicating).

Proceeding in the illustration, it is proceeding from the curb lane, and it takes subsequent positions as I am illustrating now to its position of rest in that location (indicating).

So what I'll do is I'll just get enough color on her so that you can perhaps see it from there. That's position 1 (marking).

Then, as it sustained the clockwise movement described in the hypothetical, it assumed a position simulated by 2 (marking).

As the front end contacted the median -- and I'll show the median darker, I'll put down "median" (marking) -- it reached then position 3 as the front end contacted

the median and was headed more or less as illustrated. This is number 3 position (marking).

And then, from 3, it continued to come around to make contact with the right rear wheel as described in the hypothetical in the manner that I am showing for 4, position 4 (marking).

Then it plowed across the median, developing a furrow that was indicated, which could be this effect here (drawing), and coming to rest as shown in 5 (marking).

Now, there is a pole trailer - as I understand it, that is empty - that is behind the vehicle in all stages until it disconnected, or at least became twisted and appears to be disconnected in photographs of the scene.

Q All right.

MR. SCHWAB: Is Dr. Severy going to indicate the position of the pole trailer in each of those? I gather not.

I'm sorry, your Honor.

Q Now, you've indicated, in your opinion at least, that's the way the vehicle went. In your opinion, what happened to the occupants of the vehicle, based on the facts that you have in this maneuver?

A Yes. This type of maneuver,described as being on an icy surface with some snow pack effect, would, from

tests that I've conducted under various degrees of icing with trucks, correspond to what we call a lateral drag coefficient of between 1/10 and 2/10.

And to have a better understanding of what I'm speaking about, if a truck were to be making a corner around a curve, where you start feeling some leaning forces, you would be sustaining in the 1/10 to 2/10. As you are driving you feel yourself as though you are going to the outside of the curve. That is a sensation that would be appropriate for that level of lateral deceleration.

Now, we achieved that in this particular accident. You have a feeling of directional instability before that occurs for the accident as described as it goes into the counterclockwise rotation. But what I had reference to on the 1/10 to 2/10 coefficient of friction, lateral drag coefficient, would be more appropriate to 3 on the onset illustrated at 2, and then at 4 that is accompanied, the lateral drag is accompanied, by the jolt of the rear duals contacting the curb, which would be more so than the fronts.

And additionally, after that, the plowing effect would produce a higher drag coefficient. That is because of the bead unseating of the right rear tire to cause deflation and the exposure of the rim flange to the plowing action along the furrow to its position of rest.

What happens there is that the vehicle now has lost some of its support by the deflation of the right rear tire and that effect has a tendency toward increase in the rate at which it would tip.

Q All right. Now, do you have an opinion that you could explain there in sequence as to why the door popped open? Or maybe I should ask why the door popped open.

A Well, the door popped open because of the combination of forces that developed in the 3 to 4 period of contact and would be open just -- I don't show the 4 leaning, but the truck is in a leaning mode at 4, and the door would be open or swinging, in the process of swinging open, from 4 and slightly after 4, and then, as it rolled onto its side, the door would make contact in the course of reaching 5.

Q All right. With reference to the occupant, let's take the occupant in the right front seat, do you have an opinion as to why his feet got out of the open door?

A Yes. The vehicle is undergoing lateral deceleration --

Q Pardon me. Let me put that lower extremities rather than feet.

A Yes. And in the deceleration mode all people in the vehicle are tending to push out the right side. And as

this occurs, the person nearest manifests that action the most if terms of making it outside the vehicle, which is consistent with other types of ejections that I have conducted experiments on.

Q Now, the types of ejections that you've conducted experiments on, have some of those been with slow motion movies?

A Yes, and with upsets as well as spillouts.

Q And have those had the anthropometric dummies, to see what happened to them in the spillout or rollover?

A Yes.

Q And then recorded on film?

A Yes.

Q Written up in some of your papers?

MR. REARDON: Objection, your Honor.

THE COURT: We are beyond the point of experience now.

MR. SCHWAB: Your Honor, could I merely request that we have a definition of upset, spillout and rollover? Those three terms are used and I don't know whether they are synonymous or what.

MR. WALKUP: No objection.

THE WITNESS: The spillout I have been describing and showing in the plan view on the sequence 2, 3, 4 and 5

is a counterclockwise rotation.

Upset and rollover are redundant, or synonymous, and it is a process of the vehicle going over onto its side.

Q And do you have any opinion as to the manner in which the right cab passenger sustained the injury that has been described to his twelfth thoracic vertebra?

A It has been described as -- he has been described as being in a jackknifed position, that is, feet and lower extremities, that his legs, feet, were first to exit, and this apparently had placed him in a condition that as the vehicle fell onto its side he had an upward force from the ground contact and entrapment and the inertial forces of his own body as well as any actions of others in the vehicle thrown against him.

Q All right. Now a couple of more questions here.

THE COURT: Do you need him at the blackboard now?

MR. WALKUP: No.

Q There has been reference to situations where, in a rollover or a spillout, a passenger will involuntarily open thedoor, for reference, framework.

Do you have an opinion as to whether, under the facts stated in this case, assuming them to be correct, that

the right side passenger voluntarily or involuntarily opened the door?

MR. REARDON: Objection, your Honor.

THE COURT: I'll allow it.

A Yes, I have an opinion.

Q And what is your opinion as to that?

MR. REARDON: I object to the opinion, your Honor. It is a matter within the province of the jury.

THE COURT: The jury will ultimately decide all fact questions. I've already told the jurors that the basis on which an expert's testimony is received is that ultimately they are to decide all fact issues and they are not bound by any opinion of any expert.

A That he had, by the hypothetical, both hands on the dashboard, bracing himself, and was not in a position to open the door. If he had put his hand on the handle, it is designed so that forward forces lock it, and by locking it I mean place it in a locked mode. It doesn't change the security of the latching system insofar as this particular accident is concerned but places it into a locked mode rather than an unlatched mode.

Q All right. Do you attach any significance to the noise which was described in the hypothetical question as to the cause of the opening of the door?

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MR. REARDON: Same objection, your Honor.

THE COURT: Overruled.

A Yes. The noise would be consistent with an unlatching, forced unlatching during the upset condition.

Q Now, with reference to the major damage to the chassis which I asked you to assume and the lesser damage to the superstructure in the hypothetical question, do you have an opinion as to when the major damage to that chassis occurred?

A Yes.

Q And what is your opinion on that?

A First, assuming that normal salvage operations took place, non-damaging salvage operations, and this generally is true, a reasonable assumption, with that assumption, then it was during the process of the Polecat slamdown that wrenched the frame because of the relatively high inertial forces and the leverage by which it operates that would render the frame more readily discardable than repairable.

Q Well, at the time that the door popped open, do you have an opinion as to whether that major damage had yet occurred or not?

A I have an opinion.

Q What is your opinion on that?

A It had not yet --

MR. REARDON: May I have a voir dire, your Honor?

THE COURT: Yes.

VOIR DIRE EXAMINATION

BY MR. REARDON:

Q Did you see the truck in question, sir, at any time?

A Just in photographs, sir.

Q Do you know that Professor Ehrlick looked at the truck on September 25, 1970?

A I don't know that information.

Q Have you been told that by Mr. Walkup?

A I understood he did, because it was told to me that he removed the latch.

Q He told you that he removed the latch when he was out there?

A No, not that; that he removed the latch, not when.

Q I am just asking you whether or not you knew that he had been out and looked at the truck on September 25, 1970.

A No, sir, I don't know that.

Q Were you told that?

A I don't recall being told.

Q Were you provided with any materials that he gathered in the course of his examination relative to the chassis of this vehicle and its condition at that time?

A No.

Q So your testimony as to bending of the chassis and when it was bent is based purely on what you see in the pictures and what you've been told by a lawyer.

A No. It is based on common sense.

Q Based on common sense?

A Yes.

MR. REARDON: I object to this, your Honor.

MR. WALKUP: Let me ask one further question.

BY MR. WALKUP:

Q You were shown, and so testified, a series of photographs taken of the vehicle and its damage and known as the 80H series, which it has been represented by Dr. Ehrlick that he took. Have you not seen these photographs?

A Yes, I've seen them.

Q Now, the photographs that you had seen of the scene of the accident show three off the road tires, tread, on the wheels except the right rear wheel, correct?

A Yes.

Q And that shows a different tyne of tread.

A That's right.

Q Do you have an opinion as to the effect, if any, that the different type of tread on the right rear wheel had in the overall happening of the accident?

A Yes, I have an opinion.

Q What is your opinion as to that?

A That it would not materially effect or alter the occurrences that took place in this accident for the surface that it was operating on. Other types of surfaces may have made a difference.

Q And what is your reason for that opinion?

A Well, I've run a number of studies having to do with what we characterize as the moulded grooved area. That is the void, or the groove, part of the tread contrasted with the protruding portion or the tread part of the tire. And the ratios of those areas speak to the ability to grip under some conditions.

Under the conditions of packed snow and ice, the ratio is not as critical for this type of surface as, for example, soft snow or mud. Then the off the road tire has a better performance because of utilizing the sheer stress, which is very low for mud and for snow, but it does have an advantage over the on road tread type tire.

For this type of exposure I don't visualize a significant difference.

Q Do you have an opinion as to whether the stability characteristics of the completed unit which you described yesterday played any part in the rollover?

MR. SCHWAB: Your Honor, I now object upon the grounds that the hypothetical question upon which all this has been predicated is not complete and it is not accurate and bad as to form.

THE COURT: Overruled.

A Yes. The photographs depict the rig that we are describing, and that was included in the hypothetical, and on that basis the stability of that vehicle certainly was compromised in that it added after the loading configuration and a rather excessive superstructure or high center of gravity condition, and those in conjunction with a narrow tread, meaning space between the rear wheels, very narrow compared with what the potential for that truck allows, worked to accelerate or intensify the upset potential.

The one additional factor has to do with the flotation or super single tire. The bead angle on those tires are around 15 degrees as contrasted to five degrees on a dual type tire.

The bead angle is the ramp at which the bead of a tire as you blow it up, inflate it, seats onto the bead of the rim. As you increase the angle, so does the propensity

for bead unseating increase (indicating). This is why, conversely, being nearer to a horizontal condition, meaning horizontal as it is rolling, tends to hold the bead on in a better manner.

The higher bead angle facilitated bead unseating, which deflated the tire. The tire rides higher by about two inches radius, meaning two inches -- it is really four inch diameter about, but about two inch radius placement of the axle in a higher location. That means that there is a greater fall on deflation from bead unseating, and there was the absence of the secondary tire, as you would have on a dual.

Even if the low bead angle of the dual had unseated itself, the inside dual would have been ramped up by its direct attachment with the outside dual and therefore not unseated itself and you would continue to have the support on that side.

Q Now one last question, I believe. Do you have an opinion as to why the right front door popped open but the man cab door did not?

A Yes.

Q Or I'll limit it to do you have an opinion as to why the man cab door did not pop open?

A Yes.

Q Why is that?

MR. REARDON: Objection. I know of no foundation for that question to this witness.

Q Let me ask you. Sir, from studying of the photographs and the material that you have here, are you familiar with the type of latch on the man cab?

A Only as to its external pole. The details of the man cab -- two things that are apparent in the photograph. The structure around that cab provides a more rigid condition. It is attached directly to the frame in a manner where it is a more rigid box as contrasted to the hinge points and latch points on the tilt cab configuration. So that means that the frame of the door appears to be more rugged, rigid therefore.

Additionally, it is a different latch. And, finally, it had three unbelted individuals as it rolled over. Therefore it had a higher force on it, and consequently the latch had to be of a better quality as installed, better performing quality than the front latch.

MR. REARDON: I move to strike that out, your Honor. I don't know of any foundation that would permit that conclusion.

THE COURT: Are you basing the answer, or was the answer which you just gave based, on photographs in

evidence that you saw?

THE WITNESS: Yes, your Honor, and the accident as it occurred, the conditions under which it occurred.

THE COURT: The answer may stand.

Q Do you have an opinion -- and this is the last question -- as to the part the snow and the ice condition of the road played in the accident?

A Yes, I have an opinion.

Q What is your opinion on that?

A The vehicle would not have, as described, become an uncontrollable condition if there had been pavement for the progress being made, pavement rather than snow and ice. So in that regard there was an inducing factor by the snow and ice.

As to upset, snow and ice produces a very low drag pull --

MR. SCHWAB: Objection. There is no question now. The witness has answered the question responsively.

THE COURT: I don't know if he has. You said he has.

Have you answered the question?

THE WITNESS: No, your Honor, because I've only described the beginning part of it. See, I only indicated the --

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THE COURT: You may answer. Go ahead.

THE WITNESS: Thank you, your Honor -- the onset to the directional instability problem.

A (Continuing) Then, as the vehicle goes into a semi-broadside skidding, the drag coefficient continues to be very low, such that on this vehicle, if the wheels are placed fully apart and under conditions of duals versus flotations, where we don't have a deflation of the tire, the probability is that this vehicle would not have upset because it is such a low drag coefficient.

Consequently the accident as it manifested itself would have been different, it would have been a spillout.

MR. SCHWAB: I object and move to strike out the answer based upon the witness' own qualification of the answer, your Honor.

THE COURT: Overruled. You may cross examine on that.

MR. WALKUP: I am reserving the right, your Honor, before resting. I asked some gentleman from the Jersey Central Power & Light to come over to identify this 64F for identification, the question raised yesterday, and I believe that he should be here by now, and I would like to put it in as part of the material upon which he based his opinion. Your Honor suggested that procedure in court

* * *

THE COURT: They are talking about that picture.

MR. SCHWAB: I would object to having that used subject to any connection because I don't believe any connection can ever be accomplished, your Honor, and this is a very material matter and I do object to such a procedure.

THE COURT: Where is your witness?

MR. WALKUP: Somewhere between Morristown, New Jersey and here.

THE COURT: Go ahead and examine the witness in the meantime.

(In open court)

CROSS EXAMINATION

BY MR. REARDON:

Q Mr. Severy, when did you arrive in New York to testify in this case?

A Sunday evening.

THE COURT: Mr. Reardon, would you too please try and keep your voice up?

MR. REARDON: Yes, your Honor.

Q And I think you said yesterday that sometime yesterday morning you had occasion to look at the door. Do you remember that?

A Yes. Before court, sir.

Q Was that sometime about nine o'clock in the morning or thereabouts?

A Probably.

Q And I take it that that was the only occasion that you ever had personally, other than in photographs, to look at the door itself.

A Correct.

Q You had not seen it at any time prior to yesterday morning at nine o'clock?

A On the photographs.

Q Now, you remember we took your deposition in sort of a hurry in June of this past year out in Los Angeles? You recall that, I'm sure.

A If that's a hurry, I would hate to have a slow one. It was ten hours, I think.

Q In any event, at that time you provided to us various things that you had in your file relating to the work that you had done in connection with this case; do you remember that?

A Yes, sir.

Q Now, have you supplemented your file in any respect since that time?

A Well, yes. I, for example, got the notes taken in court, I have my little kit of pencils, and I have the letter

that was written to me requesting certain material and I attempted to write the answers to that. And I think that's the extent of my -- oh, I do have annotations to two more depositions that I have had an opportunity to look at. I think that is the extent of it, sir.

MR. SCHWAB: May it please the Court, the letter that the witness is referring to is a copy, I believe, of a letter by Simpson, Thacher to Mr. Severy, which copy I gave to Mr. Walkup last night, I assume, and I wonder if I could get it back to look at it.

THE COURT: What has that got to do with his answer right now? Wait until he gets off the stand.

MR. SCHWAB: Let's put it this way: It is a letter that went into the file, I assume, within the last eight hours or twelve hours or something like that.

MR. WALKUP: I have no objection to him having it back.

MR. SCHWAB: It is my letter, in other words.

BY MR. REARDON:

Q In any event, just so there is no mystery to the letter, it relates to some questions that were left open at your deposition, and my firm, Mr. Barrett, wrote to you to get them answered; isn't that the way it was?

A Yes.

Q And you tired as best you can in this yellow slip of paper here to get up the answers?

A Yes.

Q Is there anything other than these two yellow sheets as part of the answer?

A Well, I think this very large array of exhibits and things and follow-on back in July of '73 was the initial attempt to answer all of your requirements, and there is just a systematic checking out to indicate that they were sent. And then apparently some things were not produced at that time, and that is the purpose of the letter.

Q If it would be okay with you it would be okay with me if I were to give this letter together with your attempt at the answers to Mr. Schwab.

A It is fine. I don't have a need for a copy.

Q Just temporarily.

A Surely.

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Q. Other than the things you have identified now, your file therefore now is just in the same state as it was, I take it, when you conducted your examination in June of last year?

A. Yes, I believe that's correct.

Q. Am I correct, sir, that the first time you saw the latch mechanism and the striker was some time in January of 1973?

A. That's probably correct. I can verify it if you want me to take time.

Q. Could you take a quick look, please?

A. Yes. That's correct, sir.

Q. And the latch which is Plaintiffs' 74 and the striker, 75, was sent out to you by mail, I take it, for your examination?

A. I believe that's right.

Q. You understandat that time that there had been an accident involving a truck, and that the latch was a matter which was one of the subjects at leas of that lawsuit; is that so?

A. Yes, correct.

Q. And you had received a communication from Mr. Hirschhorn, one of the attorneys for the plaintiff, who had asked you to look at the latch in connection with the case which he was prosecuting here in New York; is that right?

A. I believe that's right. I could check the correspondence if it's important for you.

Q. Why don't you just look at your top file which I think will show that you had an initial conference or discussion with Mr. Hirschhorn in November of 1972. That would have been your first contact, on or about then?

A. Initial contact was September 8, 1972.

Q. With Mr. Hirschhorn?

A. Yes. It was a telephone contact.

Q. And later you met with him and ultimately in January you got the latch for your examination?

A. Yes.

Q. When you got the latch, I take it you understood that you were being asked to render an opinion because Mr. Hirschhorn believed thatyou could provide some intelligence with respect to this latch mechanism and its relationship to the accident; is that a fair statement?

A. I believe so.

Q. And I take it when you got the latch, you did in fact make an examination of not only the latch mechanism but also of the striker?

A. That's correct.

Q. And as i recall your testimony out in Los Angeles, you indicated to us thatyou did that under circumstances where

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Mr. Hirschhorn had expressed to you that he had to have the latch back pretty quickly so that you looked at the latch on basically one occasion, and that was on January 18, 1973; do you remember that?

A. WEll, I remember that I did study and photograph the latch on that date, yes.

Q. Do you remember that there was some problem of getting the latch back to Mr. Hirschhorn quickly?

A. Sure, in my context that means don't wait another months.

Q. In any event, you did make your examination on the 18th; is that right?

A. Yes.

Q. And did you make any subsequent examination?

A. Only here in court, as I recall.

Q. When you say here in court, you mean at the time you came to court here yesterday to give you testimony in the case;and before you testified, I take it, Mr. Walkup showed you the latch and striker?

A. Yes.

Q. So that the last time you saw it before then was when you made your actual examination?

A. In January 18, 1973, yes, sir.

Q. Right. Do you remember that when you did that out in

place of business in Los Angeles, that you took a series of photographs not only of the latch but also of the striker?

A. Yes, sir.

Q. Is it fair to say that at the time you came to your deposition in Los Angeles in June of 1973 that you had formulated certain opinions with regard to the latch, the striker, and the manner of the happening of this accident?

A. Yes, sir.

Q. have you had the benefit of seeing a copy of your deposition in this case?

A. Yes.

Q. Just for purposes of identifying the extent to which you made such an examination of the latch and striker, would you look at that and see if you can confirm for me that in the course of that examination you made something on the magnitude of 50 -- I think the exact number is 49 -- photographs of the latch and striker? That is plaintiffs' exhibit 74.

A. Yes, I would agree to that.

Q. And 75. You have copies of all those photographs here with you, do you?

A. I have the originals, yes, sir.

Q. You remember you agreed to provide and did provide to the attorneys for all the parties copies of those

photographs; am I correc t?

A. Yes.

Q. Have you looked at your deposition since that time?

A. Yes.

Q. How recently?

A. I think I looked up one page yesterday in the deposition, and then before that, it was in Los Angeles.

Q. That is the extent of it?

A. As to reading the deposition, yes, sir.

Q. Would you look at those 49 pictures and tell me whether there are any pictures that you took of this latching mechanism which show the latch in the primary position on the reverse side? You see the view I am showing to you, sir?

A. Yes.

Q. Do you see the view?

A. Sure.

Q. Would you look at your photographs and see if -- I do have it in the primary condition, do I not?

A. -Yes.

Q. I want you to look for pictures of the interior portion of the latch mechanism which shows that mechanism in the primary position, which means the fully locked position, is that right, or as fully as you can lock it?

A. No, it doesn't mean that.

Q You can manually rotate something; is that right?

A. No, you misspoke yourself.

THE COURT: What is the primary position? I was going to ask.

THE WITNESS: Thank you, your Honor. It's fully latched.

Q Fully latched, all right.

A. Yes. You see, the lock is a different system.

Q Fully latched is primary?

A. Yes, sir.

Q In other words, when you slam the door and it's fully latched and in position, that is the equivalent of the primary position?

A. That's correct, sir.

Q I would like you to identify for the jury, if you would, any photographs that you took of the interior of the latching mechanism with it shown in the primary position as I am now exhibiting it to the jury.

A. I have looked through it, and I find unlatched and secondary, but no primary illustrated. The notes depict primary, however.

Q Sir, I am not asking you about notes. I think you understood me to say pictures, didn't you?

A. Yes, of course.

Q Is it correct, then, that you took no pictures

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of the latching mechanism in what you have described as the primary or fully latched position?

A. That's correct.

Q. Let me show you this photograph, which is in evidence as General Motors Exhibit A89, and which has annexed to it A103, which is a Polaroid, and ask you whether that is a fair representation of the locking mechanism, the latch mechanism, in the primary or fully latched position, and the samll POlaroid shows the striker in the latched position?

A. Yes, that's correct, sir.

Q. How may photographs did you take showing this view of the latch? By this view, I mean this side of the latch as distinguished from the side that has the rotor.

A. Oh, I don't know. I could shuffle through but It was a good many.

Q. A good many. You took 49 all together and there are a good many showing this view and none of them show it in the primary or the latched position?

A. That's right.

Q. After you got here on Sunday, did you have a conversation with Mr. Walkup about the testimony of Professor Ehrlich?

A. No, I don't believe so. He did phone me though, or I phoned him, one or the other, in connection with a

scheduling problem and he did mention some of his statements.

Q Is one of the statements that he mentioned that Professor Ehrlich, on showing these physical exhibits to the jury, and describing the locked position, initially took the position that the secondary position and the open position were the only two positions that this latch could be put in?

A Sure, he told me that.

Q He told you that, and after he told you that, did he tell you that I had taken the time to show Professor Ehrlich through these various polaroid pictures of blowups of the latch, the fact that there was indeed a primary and latched position which he didn't appear to know about?

A He told me you went into that, sir.

Q After he told you I went into that, did you then look through your deposition and your file to see whether perhaps you, in the course of your examination, in order to provide expert testimony in this case or an expert opinion in this case, had taken photographs of the latch in the fully latched position?

A No, I jsut examined my notes to see if they reflected the error or oversight that Mr. Ehrlich made, and I found that they did not, that I have known since a child that latches have two stages with a closure, because I got my finger in one

one time, and it was fortunately the secondary. If it had been primary, I would have been fingerless.

Q. Thank you for that statement, sir. Now would you answer my question?

A. that I did not bother to examine the photographs because there wasn't any intent in the photographs to necessarily display all conditions. I didn't display, for example, the condition of failure either.

Q. Condition of failure?

A. Yes.

Q. Did you find a condition of failure in the back surface of this latch?

A. I didn't say back surface.

Q. I am asking you about the back surface. Did you find a condition of failure in that surface?

A. I found no condition of failure in the back side, sir.

Q. All right.

A. Just the front.

Q. I take it you took the photographs in order to perpetuate your recollection of what the latch looked like?

A. Sure.

Q. Because various latches look differently, do they not, one manufacturer to another, do they not?

A. They do, sir.

Q. And if you didn't have photographs, you would have some difficulty recollecting, from one year to the next, certainly what the intricacies of one were next to another, right?

A. Unless I had an exemplar, which, of course, I did.

Q. You had an exemplar of this latch?

A. Yes, since my deposition.

Q. Do you have it with you?

A. NO, but I have many latche systems in the laboratory and --

Q. Are you telling us, sir, that you have a duplicate of this latch in your laboratory?

A. An exemplar is just a latch that has been obtained from a vehicle that has the same design latch, is what I am stating. It's not a duplicate because this one that I have hasn't failed.

MR. REARDON: Your Honor, I move to strike that out. There is nothing about --

THE COURT: Strike out the latter part.

MR. REARDON: There is no feature of this latch that failed. The testimony is that the design --

THE COURT: I said I granted the motion. Put your next question, please.

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Q. When you took this series of photographs for the purpose of remembering what this particular latch looked like, you also took the liberty, did you not, of writing on some of these photographs so thatyou would be able to recall how it worked; isn't that correct?

A. Sure.

Q. And if you look at the photograph marked as Exhibit C12 in your deposition, for example, you will see some of that writing; am I not correct?

A. Yes.

Q. Would you look at C19 please, and C21?

A. Yes.

Q. Do those photographs bear your writing?

A. Yes.

Q. Do they describe the manner in which this device, as you und erstood it when you made your examination, operated?

A. Yes.

MR. REARDON: I offer them in evidence.

MR. WALKUP: C12, 19, and 21?

MR. REARDON: I am offering C19 and 21.

MR. WALKUP: I think they have been marked with a plaintiffs' number.

**** (Defendant General Motors Exhibits 106 and 107 received.)

Q. Before I forget, before you stated that I had misspoken myself about the door being or the lock being latched or fully locked. I wonder if you would be kind enough -- your Honor, can the witness come over before the jury so I can ask him to explain something to them?

THE COURT: Sure.

(The witness testified before the jury box.)

- I now have the latch, Plaintiffs' 74, in the primary or fully latched position; is that correct, sir?

A. Yes.

Q. So the rotor is facing in the manner it is now; is that right?

A. Yes.

Q. And orienting this tow ard the jury, this being the right door and the frong of the truck being where Mr. Walkup is standing and the rear being toward the rear of the courtroom, I have properly oriented that rotor, have I not, as it would be in the door?

A. Yes, sir.

Q. Is that right?

A. Yes, sir.

Q. And the striker would be over here, is that right, against the B post as you call it?

A. Yes.

Q. The B post is a structure which is really a part of the cab in the case of a truck or the vehicle itself in the case of a car; right? That goes up generally from the frame up toward the roof?

A. Center door post on a car.

Q. Center door post, fine. And in order to take this mechanism and in its fully latched or primary position and for the inside passenger on that side to lock the door in the further locked position, he would cause a movement of this piece here, would he not?

A. Yes.

Q. And that would move this arm into a position which would prevent the door from being opened from the outside through any pressure upon this arm here; is that right?

A. As a result of unlatching.

Q. As a result of unlatching?

A. Yes.

Q. In other words, if I were outside the door and if it were in this position with this additional lock, and that is the lock that you mentioned after you slam the door you push it forward and it's locked, correct?

A. Correct.

Q. Further locked.

A. Not further locked. It's locked.

Q. It's locked?

A. Latched and then locked.

Q. Latched and then locked?

A. Yes, sir.

Q. And latched and then locked means the very position that I now have this exhibit in as I am showing it to the jury?

A. May I see it?

Yes.

Q. Rotor in that position and locking mechanism in this position?

A. Correct, sir.

Q. So that pessure from the outside on the door handle will not open that door?

A. The door button, yes.

Q. Would you stay in this position for just one minute, please. We get back to these two photographs. Am I correct that what is not General Motors 107 is a picture of the door, interior locking mechanism in the secondary position?

A. You misspoke, sir. You meant to say latching in the secondary, yes.

Q. All right, the latching mechanism is in the secondary position?

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A. Yes, sir.

Q. That is as I am not holding the piece itself to the jury; is that right?

A. Correct.

Q. That tooth on one lever has engaged in the area of the cutout of the other lever; is that right?

A. Yes.

Q. In that posture, the rotor is more or less on a plane; is that correct?

A. Sort of horizontal.

Q. Sort of horizontal?

A. Yes.

Q. Looking, if you will, at this larger exhibit, General Motors A85, which incidentally Professor Ehrlich said was the right door latch in the locked position, and then modified his testimony later -- is it so that this larger photograph simply is an enlargement of a view similar to what you have in C19, from your deposition, GM 107 now here? In other words, the lock, the latch in the secondary position.

A. Well, that part is true, but I show mine as locked and this is unlocked. In other words, the exhibit, the large view --

Q. Your view shows this lever on top moved over

into a locked position?

A. Yes.

Q. Which relates to what the passenger does after he latches the door; then he locks it, right?

A. Correct, sir.

Q. Limiting myself to simply the configuration unrelated to that locking mechanism you have talked about, is the larger photograph simply a duplication in effect of the same position?

A. It shows that in the secondary position.

Q. In the secondary position?

A. Correct, sir.

Q. Would you tell the jury what the secondary position is, please?

A. Yes, it's intended as a safety position in the event that the door is not closed with sufficient force. Then the latch at least engage partially, and hopefully, through vibration would warn a person that it's not fully latched.

Q. You are not supposed to ride in that position, are you?

A. Well, it's preferred not to. There is a substantial strength on the average latch for that position, but it is not a recommended location.

Q Would you read to the jury what you have written on A107 and at the same time point to the various parts that are depicted on your small photograph as I hold the larger photograph up for their examination?

A. Sure.

I indicate, number one, pushing here to release latch, and what happens is that if you have this little push button that has a plunger mechanism, that actuates linkage to press directly against there, and you can actually see a wear pattern where that has been done.

Q That is outside the door?

A. Well, the button is on the side, sir, and the wear pattern of course is part of the latch there.

Q Right.

A. Then I say, number two, I have two number twos. I say, two, rotates that lever and shown by 2 with an arrow.

Now, the 2 with an arrow is pointing to this portion right here, as you can see. It's called fixed, and therefore it rotates the lever, and I have indicated number 2 and the arrow is pointing in that direction.

Q So if I were to take this part in my hand which is now in that same position, and applying your explanation to this particular latch, applying the pressure to this point would get rotation of this arm in that direction, is that

correct, toward you?

A. Yes, that's right, sir.

Q. I am going to do it so the jury can see what happens. (Mr. Reardon demonstrated.)

Right?

A. That's correct.

Q. That moves it over into the open position?

A. Unlatched.

Q. Unlatched position?

A. Yes, sir. The door may still be closed.

Q. All right, fair enough. Would you continue with your explanation?

A. Sure.

Q. Exactly from what you wrote on there.

A. Continuing, which is locked and that is in quotes, from moving by 3. And then I show, as I indicated, different than this view -- may we have the other view -- puts them in a locked condition. It's about to be engaged here, so if you note that the locking lever has been shifted around nearly engaging the pawl lever of the latching system, and in my view that we have been discussing, which is A107, I show them fully engaged; so I make the statement, "which is 'locked' from moving by 3, then unless 3 is rotated counterclockwise, per Polar" -- meaning Polaroid -- "B, which is

3mb19



another one we don't have here.

Q In any event, what you have just been describing to the jury again relates to this upper mechanism which is interior to the cab or connected interior to the cabwhich, after the door is fully locked, fully latched, the passenger can then apply this additional lock? That is what you are describing just now?

A Yes, can lock the device.

Q Is there anything else written on that?

A I didn't quite finish that. Where I say "Polar. B to unlocked condition," and then I was speaking to the rotation.

Q That is the unlocked position that we are showing to the jury through the physical exhibit now?

A Correct.

Q Would you look please at General Motors 106 in evidence, which is one of your photographs, and see if that shows a view of the latch in substantially the same condition as it is represented by GM A88 which Professor Ehrlich described as the right door latch in the open position.

A Yes, it's in the open position, and the lock is nearly in a locking position.

Q This photograph has a good deal more writing on it

than the other one. Would you read that to the jury in the order in which it is written on there, as it should be read, and describe to them what you did with that writing in the way of arrows, etc. and the way the mechanism operates as understood by you.

A. Yes. There us actually no order implied here. You can just start anywhere in Chinese form and start reading.

In summary, at the base, one base, I say the above action disengages the latch. Then I will get into the action.

Q. When you say the above action disengages the latch, what didyou mean by that?

A. Well, I guess I have to read the above action.

Q. Why don't you read it to yourself, if you'd like, first.

A. What it amounts to is that when it is in the latched condition, if you push on the point I am pushing, indicating now, on which the push buttom applies force because of the spring loaded effect, you can disengage a latch condition and it will go to the condition that is depicted in the large photo you are holding now which is --

Q. G. M. 88.

A. Thank you. Then additionally, I amke a statement, "Pressure on latch release lever," and then I put an arrow so I am saying "Pressure on latch release" -- arrow --

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"pulls lever free of latch retention detent."

Q. The latch retention detent is this cutout, is it not?

A. Yes.

Q. In other words, in the latched position, that tooth is embedded right into that cutout as shown here?

A. Well, that's in the secondary latch, yes, that's correct.

Q. What you were describing is the pressure on this broad faced piece causes a release of that detent; is that right?

A. Detent, yes. Detente is, you know, the other--

Q. Different, yes.

A. Then I go on to say, "Allowing it to snap clockwise in this view."

Q. What snaps clockwise?

A. The --

Q. This mechanism?

A. The portion of the detent, this portion.

Then I continue. I show an arrow which is what I meant by clockwise, and I have on the lock lever an arrow indicating a direction that would be this direction that I am pointing to, that would be counter-clockwise; and then I call aht "A".

Then I say, "Inside door handle pull rod pushes "A"

against latch release," and then I show both directions; so if you construe that as pulling, then that would run this around, and I am pointing again to this lock lever, run it around to a clockwise engagement with the latch corresponding part.

Q. The lock lever, which is the upper portion of A88, is again unlreated to the latch position; this is the device through which the passenger will apply the lock to the door?

A. Yes.

Q. I take it that you went through this task of doing this writing on these various photographs in order to enable you at a later time to be able to understand the intricacies of the operation of this latching mechanism; is that a fair statement?

A. It provides a fast recall, yes, sir.

Q. In any of your photographs, did you write anything comparable to what you read to the jury from these two photographs, 107 and 106 in evidence, relating to the position or movements of this latch mechanism from its primary or latched,fully latched position into either an open position or a secondary position?

A. No, I have it in another part of my file notes on this.

Q. Not handled at all on these photographs?

A. No, sir, described in my notes.

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Q. Described in your notes?

A. Which you have a copy of.

Q. I guess maybe you better show me your notes and show me where it's described.

A. First paragraph, first part of it.

(The witness returned to the witness stand and handed a paper to Mr. Reardon.)

Q. Do you recall whether you recorded anything about secondary position or primary position on any photograph? Let me ask you that question.

A. Well, we have already talked about secondary. How you are asking probably, therefore, primary.

Q. Let me ask you about primary.

A. We have covered that. No photos depict primary, as you mentioned.

Q. Would you point out to me the language that you suggest to me indicates that you considered this latch mechanism in its primary, fully latched position, at the time of your examination of the latch on January 18, 1973?

MR. WALKUP: Pardon me, may I request that that be marked for identification? It's part of his deposition, and so the record will reflect what he is showing, it should have a number now.

MR. REARDON: Of course. May I finish the question?

MR. WALKUP: I thought you had.

Q Despite the fact that there is no photograph of it being in the primary or fully latched position?

THE WITNESS: Can I have that read back?

(The last full question was read.)

Q In other words, I just want you to point out to me if you would right here what language you suggest reflects that.

A Well, it seems that your statement is self-conflicting, and so if I can restate what I think you are asking me, I think I understand you, but I can't answer that question.

Q Let me try and ask the questionagain, if I am. Would you please show me the language that you say indicates you considered this latchmechanism at the time of your examination in January 18, 1973 in its primary or fully latched position?

A Yes, I understand that question. Right in the beginning I state --

Q No, I am asking you to point to me, sir. I think you are aware of that.

A All right, I will point to it, sir. Right here.

Q Maybe you could take this pencil and put it in brackets.

A. I have some color that would make it easier if you want to see it, using kind of a purple color I will bracket it.

However, I am bracketing out of context in response to your question, and you have to have the context to understand what it me-ans.

Q. In any event, what you have bracketed is what you say reflects the fact that you considered this latch in its primary position when you made your examination ?

A. Certainly.

Q. And that is all?

A. That's all what?

Q That is all that reflects it? What you have bracketed?

A. Do you mean that I did examine in primary and secondary?

Q. Yes.

A. Certainly.

Q. This is the evidence?

A. Corresponds to primary.

Q. This is the evidence?

A. Of course it is.

Q. When you say of course it is, you mean yes, I take it?

A. es, I do mean yes.

Q. That is just your way of being more forceful, is it?

A. No, no, it's just another way of answering. Doesn't mean to be more forceful.

THE COURT: While you are looking at that, do you mind if I aska question for the purposes of what I hope will be clarification?

MR. REARDON: I don't mind at all, your Honor.

THE COURT: Assume that the passenger is on the inside of the car, and the door is open, and he pulls the door towards him and closes the door. What position is the latch in then? What do you call that?

THE WITNESS: Taht's primary, it's in the primary latched position, your Honor. If he closes --

THE COURT: The door is not locked then?

THE WITNESS: No, sir, but with the further qualification, if he closes it forcibly and it's adjusted so it will reach the primary condition.

THE COURT: I don't understand the last part. I am trying to put a simple question to you here. The passenger is on the inside. This is where I am sitting in the car, and this is the right-hand side.

THE WITNESS: Yes, your Honor.

THE COURT: The door is open and I pull the door towards

me and it's closed.

THE WITNESS: Yes, sir.

THE COURT: What position do you call that?

THE WITNESS: Primary latched position.

THE COURT: And at that point, is the door locked?

THE WITNESS: No, sir.

THE COURT: What is the next move? Suppose I want to lock the door. Do I press the lever down?

THE WITNESS: In this particular vehicle, sir, you push the handle forward.

THE COURT: Push the handle forward, and what position is that when thehandle is pushed forward?

THE WITNESS: Then it's in the -- the door is in a locked position, and the latch is on the primary latched position.

THE COURT: Read the answer.

(The last answer was read.)

THE COURT: I understood that the primary latched position was when the door was pulled toward the passenger, and closed.

THE WITNESS: Yes, your Honor.

THE COURT: Is that the primary latched position?

THE WITNESS: That's correct.

THE COURT: When the handle is pushed forward and the door locks, what position do you call that?

THE WITNESS: I call that -- the door is locked, it's in the locked position, but the latch remains in the primary latched position, and I can explain that just a little further if it would help.

THE COURT: Suppose you do it.

MR. REARDON: Could I take a crack at it, your Honor, with a simple question?

THE COURT: Go ahead. WE have used these expressions, and in the hope of clarification here, I am just trying to give a picture as the passenger himself goes through these motions here.

Q. When you step in your car, the door is open, and you step inside, and let's assume it has a configuration of latch and striker just like these two exhibits. All right?

A. All right.

MR. REARDON: Your Honor, could I try it again before the jury?

THE COURT: You do it. You are the one that is cross examining, so go ahead and do it. I think this could be explained without immediate reference to the objects you have in your hand. This is the ordinary passenger in a car on the inside. I am trying to go through the motions and let him describe the various steps.

Q. You step inside the car, and you close the door,

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give it a good slam.

A. Yes.

Q. That turns the rotor into the primary position, correct?

A. Primary latched position.

Q. Primary latched position?

A. Correct.

Q. In the passenger car, you would have a button which you would generally press to your right which would then cause a locking mechanism to take effect, right?

A. In some years. Others use the handle.

Q. Others use the handle. In this particular truck, you use the handle and push it forward, right?

A. Correct.

Q. When you push it forward, the rotor is still in the primary position, correct?

A. Correct.

Q. But you are just putting an additional locking device on; is that correct?

A. No, because you are saying "additional" locking. You are putting the locking device.

THE COURT: That is what I am trying to get to understand here. Will you allow me to do it again?

MR. REARDON: Of course, your Honor.

THE COURT: Members of the jury, please understand that I am simply asking these questions for the purpose of clarification, and please don't draw any infrence that the Court has any attitude about this. The judge's function is to clarify matters which may be in doubt or not altogether clear.

We take this through the process I just suggested to you again. I am the passenger on the inside of the truck here. We are referring to the truck her, the cab in question, and I pull the door toward me, and it closes.

What position do you call that?

THE WITNESS: Primary latched position.

THE COURT: Is the door locked at thatpoint?

THE WITNESS: No, technically not locked, but it can open, you understand.

THE COURT: That is what I am askingyou. At that point that door can open, it's not locked, the locking mechanism has not been engaged yet?

THE WITNESS: Correct, your Honor.

THE COURT: And in order to engage the locking mechanism on this car, you pull the handle forward?

THE WITNESS: Yes.

THE COURT: When you do, you put into operation a locking device?